

"...ce dangereux supplément..."

Introduction

"...ce dangereux supplément..." is a set of phonetic studies for solo voice, with optional electronics and projections. A suite of three pieces [(*tras*), (*spektʁ*), and (*sādʁ*)], the work is based on a close examination of the sounds used in everyday linguistic activity, which are juxtaposed against more extreme vocal effects. The live performance is supplemented with electronic voices which stretch and transform this common vocality. The visual projections range from rapid-fire successions of symbols from the International Phonetic Alphabet, to more suspended meditations on elaborately arranged orthographic tapestries made from the same symbols. "...ce dangereux supplément..." (CDS) is a poetic rehearsal of the Derridean supplement, in which the performer acts out a futile search for the primary referent (or "master signifier"), but eventually realizes all that is to be found is an infinite hauntology, a spectral chain of traces, specters, and cinders.

The ontology of text-setting

It has been common practice in Western music for hundreds of years for composers to 'set' the words of a pre-existing text to music. Such practice involves re-contextualizing the written text in a musical 'setting' which typically aims to express, reinforce—or, in many cases, to deepen and enhance—the meaning. How this practice specifically manifests itself in the technical execution of the composition has varied according to the aesthetics of particular schools or composers. However, what discrete disciplines like Caccinian monody, *stile rappresentativo*, *Opera seria*, or Wagnerian music drama have traditionally held in common is an ideal of semantic fidelity: that the text should guide the music, and that the music should illustrate, realize, or embody the *meaning* of the text.¹

¹ One can find proclamations of such ideals throughout the centuries, from St. Augustine proclaiming that "it is not the singing that moves me, but the meaning of the words when they are sung in a clear voice to the most appropriate tune," to Caccini writing in the forward to his *Le nuove musiche* that he was persuaded "not to prize the sort of music which, by not letting the words be properly understood, spoiled both the sense and the verse [...] but rather to adhere to the manner so much praised by Plato and other philosophers, according to whom music consists of speech, rhythm, and last, sound." Augustine and Caccini quoted in Piero Weiss and Richard Taruskin, *Music in the Western World: A History in Documents* (New York: Schirmer, 1984), 32; 170.

A musical work composed according to such ideals presents a significant ontological problem: what is the relation of the text-setting to the text? It is clearly not a part of the written text, but yet the text is a part of it. It is a distinct work, and yet aims to express the very same meaning as the text, indeed to manifest that meaning more concretely. It also seems to fill a void: one would not seek to illustrate the meaning of a text musically unless that text somehow called out for, or required, such a realization.² This problematic is not limited to the relationship between the original text and the musical setting as discrete works, but is embedded in the musical work itself: the music sets the words the singer sings, and yet these sung words themselves both are and are not part of the musical composition. The musical text-setting supplements the written text, and, within the confines of the musical composition itself, the words supplement the music.

Strange unity

The ontological predicament of the *supplement* is most clearly articulated in the second part of Derrida's *Of Grammatology*. The author traces the contours of this dilemma with regard to the privilege that Western metaphysics (from Plato, through Saussure and Levi-Strauss, etc.) has granted to speech over writing, what Derrida calls 'Logocentrism'. While speech is viewed as being the embodiment of a *presence*, coming directly from a speaking/thinking subject, writing is marked by *absence*: it is a representation or mediation of speech, a step removed from the subject. The written expression substitutes for the spoken expression, carrying the same information, but doing so *in absentia*. Speech is a living embodiment of subjectivity; writing is lifeless, dead, and therefore carries the potential for corruption.

It is from within this relationship that Derrida outlines the concept of the 'supplement': a secondary, unbelonging surplus in a binary opposition which is (contradictorily) crucially indispensable. Derrida demonstrates that writing exists as a supplement to speech: it does not belong, it is an excess (and a dangerous one), however, writing is *required* by speech, it makes

² One should also consider the potential for violence done to the text, as a musical setting will often impose a new rhythm and melodic contour onto a text which, when spoken, already has an inherent rhythm and melody (one that a poet likely crafted with care and intention).

up for a lack inherent in speech itself. By referring to one of key concepts of Saussurian linguistics, the 'arbitrariness of the sign' (i.e., the idea that the signifier has no intimate or inseparable connection to the signified), Derrida demonstrates that absence is not just a quality of writing but is, in fact, a feature on which spoken language is itself dependent: if language relies on a system of differentiated, arbitrary signifiers which bear no absolute connection to the signifieds, then not only is writing no less arbitrary than speech, but speech itself depends on a space, a gap—an absence or mediation—between the signifier and the signified. This gap, what the author later terms *différance*,³ is what is required for signification to occur in the first place.

Rather than simply reversing the hierarchy, and proclaiming writing to be the dominant member or an equally necessary partner within the binary, Derrida portrays this dualism as comprising a "strange unity,"⁴ one which is not actually reducible to a pair of differentiated items.

[O]ne must exclude any relationship of natural subordination, any natural hierarchy among signifiers or orders of signifiers. If "writing" signifies inscription and especially the durable institution of a sign (and that is the only irreducible kernel of the concept of writing), writing in general covers the entire field of linguistic signs. In that field a certain sort of instituted signifiers may then appear, "graphic" in the narrow and derivative sense of the word, ordered by a certain relationship with other instituted—hence "written," even if they are "phonic"—signifiers. The very idea of institution—hence of the arbitrariness of the sign—is unthinkable before the possibility of writing and outside of its horizon.⁵

The logic of the supplement is that in such strange unities, the element which is seen to be secondary and corrupting is often both an aid (supplement) and a replacement (substitute) for the 'primary' element.

³ This neologism requires writing to be differentiated from the homophonic French term, "différence," thereby illustrating the necessity of writing to resolve the ambiguities inherent in speech.

⁴ Jacques Derrida, *Of Grammatology*, trans. Gayatri Chakravorty Spivak (Baltimore: Johns Hopkins University Press, 1997), 142.

⁵ *Ibid.*, 44.

For the concept of the supplement [...] harbors within itself two significations whose cohabitation is as strange as it is necessary. The supplement adds itself, it is a surplus, a plenitude enriching another plenitude, the *fullest measure* of presence. [...] But the supplement supplements. It adds only to replace. It intervenes or insinuates itself *in-the-place-of*; if it fills it is as if one fills a void."⁶

Perhaps the most ontologically puzzling aspect of the supplement is this simultaneous void-filling (presence) and its absence. In fact, this problem of presence is the basis of Derrida's critique of metaphysics in general, a critique at the core of which lies the supplement:

It is the strange essence of the supplement not to have essentiality: it may always not have taken place. Moreover, literally, it has never taken place: it is never present, here and now. If it were, it would not be what it is, a supplement, taking and keeping the place of the other. [...] The supplement is neither a presence nor an absence. No ontology can think its operation.⁷

The supplement is not only evident in the binary between speech and writing, but in any binary in which one 'present' element is valorized over a secondary, 'absent' element. Derrida lists several examples, "death to life, evil to good, representation to presence, signifier to signified, representer to represented, mask to face, [...] dream to wakefulness."⁸ Through a close reading of Rousseau, the author identifies and examines several other supplements, including masturbation to 'natural' sexual relations,⁹ harmony to melody, and consonants to vowels. The supplement is, like the quasi-synonymous *différance*—"a terrifying menace,"¹⁰ to the

⁶ Ibid., 144-145.

⁷ Ibid., 314.

⁸ Ibid., 315-16.

⁹ In his *Confessions*, Rousseau refers to masturbation as "ce dangereux supplément," (that dangerous means of assisting it). It is from this text that Derrida takes the title to his important essay on the supplement in *Of Grammatology*, and it is from that essay, that *CDS* takes its title.

¹⁰ "A terrifying menace, the supplement is also the first and surest protection; against that very menace." Ibid., 154.

metaphysics of presence and Derrida writes of its "virulence" and its inability to be domesticated or tamed.¹¹

Setting Derrida

Derrida's writing clarifies the problematic nature of the aforementioned relationship between text and text-setting (i.e., signified and signifier): the setting, as supplement, would be both curse and cure, necessary and corrupting.¹² Were any composer inclined to 'set' one of Derrida's texts, they would be presented with an additional difficulty: if, according to common-practice aesthetics, the purpose of a text-setting is to embody or illustrate the meaning of a text, how does one do so with a text that concerns itself with the constant deferral of meaning? How does one concretize (i.e., make present) a meaning which problematizes the very act of being present?

CDS represents such an attempt to set Derrida. However, it does so not by setting sentences from Derrida's texts to music, but instead by creating a piece rife with ontological paradoxes of its own. *CDS* presents itself both as a rehearsal of the supplement, and as an exploration of the implications of that 'strange unity' in music and language.

This is initially apparent in the piece's modularity. As a suite of three studies which can be performed together or in isolation, in any order, and with or without electronics and/or projections, *CDS* consists essentially of a chain of supplements. The piece contains all the supplementary peritexts that are features of most musical works (title, score, program note), but supplements these with additional appendages. The optional electronic elements, each of which are created by the composer and meant to add dimension(s) to the piece can be seen as both integral and external to it.¹³ The modular nature of the three individual studies, each a

¹¹ Virulence—one immediately thinks of Burroughs' "language virus," and *The Electronic Revolution*, which, in addition to proclaiming that language is an extraterrestrial virus, makes the quasi-Derridean claim that the virulent written word predates the spoken word. Burroughs, *The Electronic Revolution* (ubuclassics, 2005). For more on the virulence of the supplement, see Nicholas Royle, *Jacques Derrida* (London: Routledge, 2003), 50.

¹² It would seem that text-setting is necessary to embody or more fully express the meaning of a text, and yet, this embodiment can undermine or do violence to the text in manifesting it.

¹³ In addition, this very paper, as part of the final dissertation project and meant to elucidate and expand on it, is both external to the work and yet inextricably linked to it.

supplement to the other, likewise contributes to this idea ("the supplement supplements"). The result is a hole at the center of *CDS*, a gap in which one realizes that there is nothing that can be said to properly *be* the piece, but nothing that can be said to be dispensable. Or, in Derrida's words: "Through this sequence of supplements a necessity is announced: that of an infinite chain, ineluctably multiplying the supplementary mediations that produce the sense of the very thing they defer: the mirage of the thing itself, of immediate presence, of originary perception."¹⁴

This is particularly true with regard to the piece's score and the studio recording/video of the piece. If *CDS* proper is analogous to speech, then these elements would be the corollaries to writing. While this is true of the relationship between any piece of music and its score, *CDS's* ontological situation is more akin to that of works of concrete poetry or graphic compositions, in that while the score is used as a performance aid and written record of the piece, it can also exist as a piece(s) of visual art. The score therefore is as much *CDS* proper as the sonic components. The paradox of the recording is more straightforward, but no less significant: as a recording, it is an inscription (in this case, of binary digits onto a hard drive), a memory of a past performance. While a polished inscription of a particular performance can carry some ontological weight—think of how, in popular music, the recording is upheld as a work's definitive version, as opposed to the live performance, which is treated as a temporary recreation or reenactment—the experience of hearing/viewing any recording is always one of reliving a memory. As Derrida says in the film, *Ghost Dance*, "The cinema is the art of ghosts, a battle of phantoms. It's the art of allowing ghosts to come back."¹⁵ Such is true for this recording especially since, as an open and quasi-improvisatory work, there is no definitive performance of the piece, and thus the

¹⁴ Derrida, *Of Grammatology*, 157.

¹⁵ Ken McMullen, *Ghost Dance* (Channel Four Films, 1983).

recording represents one of an infinite series of possible readings: a record of a transient collection of gestures and utterances.¹⁶

More than the simple modular nature of the work itself, *CDS* attempts a setting of Derridean ideas by creating a musical environment in which the problems Derrida examines in his texts can be inhabited by performer and listener. When it was said/written earlier that *CDS* is a 'rehearsal' of the supplement, it was meant that the piece—in its material, form, narrative, and performance—acts out an exploration of linguistic material (and 'act' because its end point is always predetermined: a spectral chain of traces and cinders). Rather than 'embodying' the author's words, as in traditional text-setting, *CDS* attempts to encircle them, to trace their contours, and reveal the *lack* of embodiment, the ghostly nature ('hauntology') at the heart of language. The specific ways this is done in each study will be addressed in later sections.

Phonetic studies

CDS consists of a trio of phonetic studies. Each of these pieces are at their core an exploration not just of heady post-structural concepts, but of the actual tangible sonic material of language. The bulk of the sounds consist of those used in everyday speech—the vowels and consonants commonly employed by languages spoken around the world—which are organized into a mixture of pre-composed and improvised musical gestures. This focus on phonetic material is meant to exhibit the inherent musicality of speech, while the non-linguistic context allows individual phonemes to be heard as sonic objects rather than meaning-bearing signifiers (i.e., while they retain their position as *phonetic* material, they begin to shed their *phonemic* status). These linguistic sounds are combined with non/extra-linguistic utterances (exclamations, chokes, gurgles, assorted buccal sounds, etc.). Not only does this broaden the work's sonic palette—allowing the full range of vocal utterance, from the softest whisper to the most violent

¹⁶ This claim of infinite modularity is admittedly problematic when one considers the actual performance history of the work. While, in theory, the individual studies can be performed in any order, in practice, they have almost always been performed in score order. While, in theory, the work can be performed with/without electronics, it has almost always been performed with the electronics. This adds a layer of depth to the paradox: does such a performance history mean that the work *does* in fact have a proper form, a realization we can point to and say *this* is *CDS*? Even if this were the case (and if I'm honest, I would admit that it likely is), the relationship of the other possible realizations—several of which *have* been performed, however infrequently—to the 'proper form' would be, arguably, even more clearly supplementary.

scream—it also provides for an exploration of the liminal borders between language and non-language (or language and music).

Such explorations are not uncharted territory, as they have been examined by sound poets and composers of contemporary vocal music for some time. Early Dada poets such as Hugo Ball and Kurt Schwitters excelled in the composition of *poésie phonétique* (phonetic poetry), which reduced language to the "innermost alchemy of the word"¹⁷ and created new, non-semantic constructions:

gadji beri bimba
glandridi lauli lonni cadori
gadjama bim beri glassala¹⁸

Isidore Isou reduced this alchemy even further with his 'lettrist' poetry, which consisted simply of sequences of individual letters. Greil Marcus describes the artist's approach: "He would forcibly reduce the word to the letter, the pure sign, seemingly meaningless, in truth endlessly fecund. [...] The letter would be ready to form a new alphabet and a new language, a language that could say what had never been said, in tones that had never been heard."¹⁹ This poetry of individual linguistic particles is not only of particular influence on the poetic lexicon of *CDS*, but it is also an important progenitor of visual/concrete poetry, and its underlying philosophy shares some important ideas with Saussurian linguistics:

[...]the lettrists pushed their post-dada letter poetry into "estheperist" poetry, a poetry of the final element, a proto-language based on linguistic particles "that have no immediate meaning, where each element *exists in so far as it allows one to imagine another element which is either nonexistent or possible* [...]"²⁰

¹⁷ Hugo Ball, *Flight Out of Time: A Dada Diary*, ed. John Elderfield, trans. Ann Raimés (Berkeley: University of California Press, 1996), 71.

¹⁸ *Ibid.*, 70.

¹⁹ Greil Marcus, *Lipstick Traces: A Secret History of the Twentieth Century* (Cambridge: Harvard University Press, 1989), 248.

²⁰ *Ibid.*, 253. The link to Saussure—and by extension, Derrida—will become more apparent in the forthcoming discussion of the 'trace'.

It was not long before this "pure" phonetic poetry evolved into an expanded repertoire in which pre-existing letters intermingled with invented hieroglyphics, termed "metagraphics" or "hypergraphics", a technique which aimed to "[introduce] into alphabetic writing not only the art of painting, but the graphics of all peoples or social categories past and present, as well as the graphics or anti-graphics of every individual imagination."²¹

Later sound poets sought to move beyond the phoneme, and composed works of *poésie sonore* (sound poetry) that incorporated the full gamut of vocal sounds, with a greater consciousness of the human body as a sonorous system.²² For these later artists, the sonic landscape of the human body was often extended through the use of electronics, as in the work of Henri Chopin, whose 'audiopoems' consisted of everything from quiet breath sounds to uninhibited screams, each accompanied by manipulated recordings of a similarly broad range of vocal sounds. The Canadian sound poetry quartet, The Four Horsemen, sought to create equally visceral works, but rather than relying on electronics, their work was marked by an open, improvisatory character. Emphasizing the visceral nature of sound poetry, the text of one particular Four Horsemen piece proclaims, "Since sound proceeds from the body, sound poetry must be a body poetry. The performance area is the page upon which our bodies write."²³ This concept of "writing" with the body, or with the voice specifically, is one of significant importance to *CDS*.

There has often been an obvious connection between sound poetry and contemporary vocal music,²⁴ as both tend to create abstract works focused on the sonic material of the voice. In music, one is reminded of the experiments of Luigi Nono, Karlheinz Stockhausen, Georges Aperghis, and Luciano Berio, all of whom used vocal material in ways that moved beyond (or coasted beneath) traditional text-setting, as in Stockhausen's *Stimmung*, with its exploration of

²¹ Isidore Isou quoted in Ibid.

²² This distinction between *poésie phonétique* and *poésie sonore* was first articulated by Henri Chopin. Chopin, *Poesie Sonore Internationale*, ed. Jean-Michel Place (Paris: Trajectoires, 1979).

²³ Four Horsemen, "Schedule for another Piece: A theory of Practice," *The Prose Tattoo* (Milwaukee: Membrane Press, 1983), 6.

²⁴ An admittedly problematic term, by "contemporary vocal music" I am simply referring to avant garde and experimental music composed within the past six decades which prominently features the voice.

vocal harmonics and diphonic singing, or the virtuosic gymnastics of Aperghis's barely-texted *Recitations*. Such composers also used electronics to augment and transform the voice, from Pierre Henry's early *musique concrète* experiments (e.g., "Vocalises" from *Le Microphone Bien Tempéré*, which focused on the single syllable, "ah") to Berio's electronic masterwork, *Thema: Omaggio a Joyce*. The latter consists of spliced-together recordings of singer Cathy Berberian reading excerpts of James Joyce's *Ulysses*. By reorganizing Joyce's text into phonetic "sound systems" (including a flowering gesture using the "bl" from "blooming" and an extended meditation on sibilant fricatives), Berio constructed an electronic work which focused on the sonic qualities of the voice, using the material of language but remaining, essentially, outside of language.²⁵ More recent endeavors by Dmitri Kourliandski (e.g., *Voice-off*, 2008) use repetition to magnify non-linguistic sounds, such as saliva-smacking, teeth-chattering, and subtle snorts, creating continuous soundscapes which emphasize the bodily nature of the human vocal apparatus.

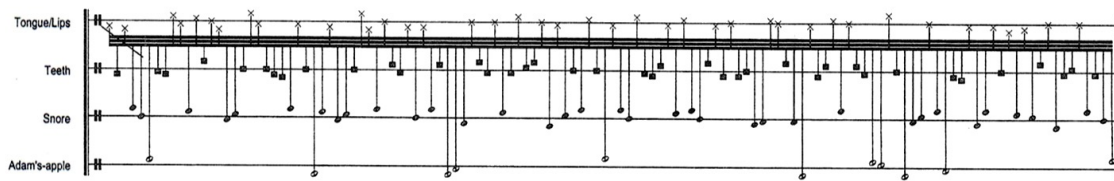


Fig. 1: Dmitri Kourliandski *Voice-Off*
(Paris: Editions Jobert, 2008).

Each of these strategies has laid some of the groundwork for *CDS*, which borrows from, extends, and attempts a synthesis of many of these aesthetics and approaches. It is arguably this synthesis of these disparate-but-overlapping strategies that is one of *CDS*'s most unique attributes. In dialoguing with the traditions of sound poetry, contemporary vocal music, electronic music (and, as we'll see, concrete poetry and electronic poetry), the composer is well-positioned to exploit the strengths and peculiarities of each discipline in an engagement with the aforementioned Derridean predicaments.

²⁵ For more on Berio's *Thema* see David Ernst, *The Evolution of Electronic Music* (New York: Shirmer, 1977), 4-6.

Grammatology

The score to *CDS* (that is, its written form), rather than being notated in conventional musical notation, is a graphic score which employs a variety of visual symbols to denote sounding events (including a limited number of symbols from conventional musical notation). These symbols range from having very specific sounding results, to having more ambiguous, open-ended interpretations.²⁶

In the former category, the vast majority of *CDS* is composed using symbols from the International Phonetic Alphabet (IPA), a standardized system of phonetic notation employed by linguists to denote specific sounds from spoken language. Consisting of over a hundred letters, with over fifty modifying diacritics, the IPA is the most thorough and systematic notation of linguistic sounds.²⁷ While most often used by phoneticians and others in the linguistic field, the IPA has been increasingly employed by composers and performers of contemporary music to notate vocal sounds without reference to any particular linguistic context.

One of the important ideas underlying *CDS* is that the IPA, in notating with some precision a wide gamut of different sounding events (and their relations to one another), represents not just a thorough linguistic notation, but arguably one of the most detailed systems of sonic—i.e., *musical*—notation. Each phonetic sound has a unique set of features resulting from its location of articulation (i.e., placement in the mouth, such as alveolar vs. palatal), method of execution (e.g., pulmonic vs. non-pulmonic consonants), type of phonation (e.g., voiced vs. voiceless vs. breathy), and intonation; all of which, in various combinations, result in differences in fundamental acoustic properties such as frequency/bandwidth, timbre, and envelope. With the possible exception of conventional music notation, no other system of sonic notation has a widely accepted repertoire of over a hundred symbols which refer to such specific

²⁶ Naturally, as a graphic score, the piece relies heavily on the tradition of graphic composition. Several aesthetic alignments and syntactic intersections can be found between *CDS* and the work of Earle Brown, John Cage, Cornelius Cardew, Sylvano Bussotti, and Anthony Braxton, as well as more recent artists such as Will Redman.

²⁷ As an attempt to catalog the sounds of all the world's languages, the IPA immediately reminds one of Isou's 'hypergraphics'. While the former attempts to index the sounds of every language, the latter sought to incorporate the graphics "of all peoples or social categories past and present."

which will have a different formal result, while maintaining essentially the same character. This play between local specificity and gestural ambiguity is at work throughout *CDS*.

The 'p-cloud' section also reveals *CDS*'s close connection to the tradition of concrete poetry. Concrete and visual poetry are poetic disciplines in which the visual or topographical arrangement of (textual/non-textual) elements is a fundamental factor of the work. Visual poetry is a more broad discipline closely related to graphic score composition in music, in which works may consist of any collection of visual symbols, and may or may not include any text at all; concrete poetry refers more specifically to an engagement with the 'concrete' material of written language, and consists of typographical and text-based experiments. While one can find examples of what could be considered concrete works throughout the centuries, the tradition with which *CDS* most directly engages is that of Post-War concrete poetics, specifically such work as the typewriter art of Bob Cobbing, the phonetic constellations of Ernst Jandl and Gerhard Rühm,

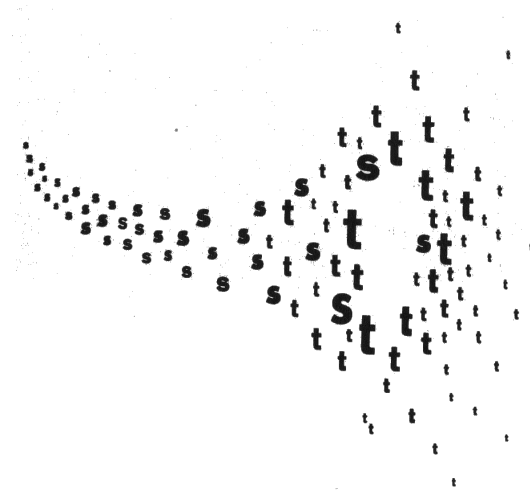


Fig. 3: Gerhard Rühm, "sssssssst," (1970)
from *i my feet* (Providence: Burning Deck, 2004).

the logographic wordplay of Seiichi Niikuni, the grid-based 'gathas' of Jackson MacLow, the typographical and book-based experiments of Steve McCaffery, and the more recent visual puns of Derek Beaulieu. Emmett Williams elaborates on the nature of these artists' work:

The visual elements in their poetry tended to be structural, a consequence of the poem, a "picture" of the lines of force of the work itself, and not merely textual. It was a poetry

far beyond paraphrase, a poetry that often asked to be completed or activated by the reader, a poetry of direct presentation—the *word*, not *words*, *words*, *words* or expressionistic squiggles—using the semantic, visual and phonetic elements of language as raw materials in a way seldom used by the poets of the past.²⁸

Williams' use of the term "force" is of particular interest, when he refers to the topography of such works as outlining the "force of the work itself." This term is evocative and ambiguous, much like the work he is describing. However, viewed in the light of the Derridean critique, the term "force" takes on a more concrete, but still equally vague definition. In *Writing and Difference*, Derrida refers to that slippery impossibility (with which he is perennially preoccupied), which exists before or beyond language, as "force": "Force is the other of language without which language would not be what it is."²⁹ Viewed in this light, much concrete poetry could be said to be reaching for this *other* of language, articulating that which is outside of language but without which language is impossible (i.e., the 'supplement' of language).³⁰ This would certainly be true of *CDS*, in which such orthographic tapestries attempt to underscore its material as being part of a differential system of traces (more on this soon).

The score exists not just in a written form, but also as a series of (optional) animated projections. These projections were commissioned as part of *CDS*'s inclusion in the 2015 Digital Poetry and Dance event hosted by the University at Buffalo Department of Media Study and the Electronic Poetry Center.³¹ For this performance, the visual elements of the score were adapted

²⁸ Emmett Williams, ed., *An Anthology of Concrete Poetry* (Primary Information, 2013), vi.

²⁹ Shortly before this phrase, the author states, "*To comprehend* the structure of a becoming, the form of a force, is to lose meaning by finding it." This idea of losing meaning by finding it, or of a meaning which obliterates itself immediately upon its becoming, plays an important role in the third study of *CDS*, (*sādḥ*). Derrida, *Writing and Difference*, trans. Alan Bass (London: Routledge, 1978), 31.

³⁰ 'Force,' 'supplement,' and 'différance,' are the first of several overlapping terms that play key roles in Derrida's work. The author refers to these, and others ('trace,' 'iterability,' 'cinders', etc.) as part of a "chain [...] of nonsynonymous substitutions." Derrida, "Différance" in *Margins of Philosophy*, trans. Alan Bass (Chicago: Chicago University Press, 1982), 12.

³¹ It was at the suggestion Dr. Loss Pequeño Glazier, director of the UB Electronic Poetry Center and coordinator of the event, that the performance include projections of the score. I should take this opportunity to again thank him for the invitation to perform as artist-in-residence at this event, as well as for his continued enthusiastic support of my work.

into kinetic digital projections, which are triggered live in performance via a Jitter patch written by the composer. The animations range from quick successions of relevant IPA symbols (an effect evocative of 'writing' on the screen with the voice) to more elaborate unfoldings of the score's visuals in close synchronization with both the live performer's voice and the electronic accompaniment. Such visuals underscore the narrative of the piece, in which the performer traverses a field of supplements which embody the aforementioned Derridean problematics. While the original score lays out the environment of each study for the reader to view as a simultaneity, the projections' temporal unfolding reinforces the concept of a wide web of signifiers being explored in real time.

The full suite of pieces with electronics and projections was premiered at the Digital Poetry and Dance event on January 31, 2015. The specifics of each section's projections will be addressed during discussion of each study.

Hearing oneself speak

The live vocal performance can be supplemented with optional electronic accompaniment. This accompaniment consists of stereo fixed-media recordings which add dimension to the live voice through reflection, augmentation, and layering. Specifically, the electronics consist mostly of vocal recordings with some limited digital signal processes applied, including filtered and transposed delays. These voices play a number of roles: providing simple echoes or resonances to the live performance; 'reading' the piece in tandem with the performer; occasionally overtaking the piece from the performer entirely.

The use of fixed media samples relates to the aforementioned supplement of writing to speech. Since a vocal recording is quite literally an *inscription* of speech, it embodies both sides of this dialectic, while underscoring its disunity. The idea of iterability, of the repeatability of a written text in the absence of the author, is of particular importance to (*spektv*), and therefore the corollary between recording and writing is a necessary part of that study's syntax: the performer reckons with a vocal text, whose author may or may not currently be present.

Such an electronic component adds some complication to the piece, in that, while *CDS* may be read by any performer, a performance that utilizes the electronic component should be performed by the composer himself, as the samples consist of recordings of the composer's own voice. Because the electronics are meant to be reflections and refractions of the performer's voice, it is preferable that the performer's voice match the recorded voice, and, with the electronics being fixed, they will only ever 'match' the composer's voice. This peculiar dilemma could, admittedly, be remedied through the use of live electronics as opposed to fixed-media.³² However, a live electronic version of the piece would run the risk of severing ties to the idea of writing, as it would require the author of the speech-text to be present and would no longer become an iterable document.³³

One may still wonder why the performer's voice should match the recorded voice, surely the voice of any performer can 'read' an electronic text by another author, in fact, according to Derridean thought, any reader is, by necessity, a different subjectivity than the author. It is precisely this split in consciousness that *CDS* is meant to portray, the experience Derrida writes of called "*s'entendre-parler*", "hearing-oneself-speak," which requires the voice of the performer and electronics to be from the same source.

In several texts, most notably his engagement with Husserl in *Speech and Phenomena*, Derrida describes the experience of hearing-oneself-speak as a form of "auto-affection". Like the aforementioned case of masturbation, hearing-oneself-speak is a situation in which the subject is split into two roles, each acting on the other. Hearing oneself speak, either aloud or via one's internal monologue, presents a case of self-proximity, the immediacy of the event seeming

³² A quick clarification of terms: fixed-media electronics are those that consist of recorded samples (what used to be called 'tape music'). These are unchangeable and remain constant from performance to performance (hence 'fixed'). Live electronics are those that process an instrument in real time during the performance (like a guitar signal being sent through an effect-box), and are variable from performance to performance.

³³ This is admittedly an arguable proposition, especially when one considers that the electronics consist of numerous delayed sounds which, by displacing the sounds in time from their initial utterance, and repeating them ('iterating' them), create a situation in which the performer *is* engaging with a text by an absent author (namely, themselves in the past). In practice however, such an approach tends to have less the impression of the performer dialoguing with their own voice than that of dialoguing with the computer itself. One thinks of the works for solo instrument and live electronics by Cort Lippe, many of whose titles underscore this understanding of such a dialogue: *Music for Piano & Computer*, *Music for Cello & Computer*, *Duo for Cajón & Computer*.

to imply a singular transcendent presence, a 'self' (think of Descartes' *cogito*), or at least, a self-presence. However, as Derrida points out, there is always already a split at the origin, as the subject is at once both speaker and hearer. This split, following the logic of the supplement, both establishes the subject and prevents it from being a full union,³⁴ it is, instead a 'strange unity'.

It is this problematic experience of auto-affection that *CDS* strives to recreate in its narrative, the relationship between live performer and electronic inscription being akin to the divided auto-affective subject. However, the piece goes one step further: rather than just acting out a hiatus between speaker and listener, the piece presents the voice itself (whether coming from performer or loudspeaker) as a source of division. The live performer's voice jumps frantically from vowel to consonant, from whisper to shriek, often moving as if of its own accord (i.e., against the will of the performer). The electronic voices in *CDS* often insert themselves aggressively (particularly in the second study), even, in one climactic moment, overtaking the texture entirely. This stems from a more psychoanalytic understanding of the voice, as articulated by Slavoj Žižek in *Interrogating the Real*:

In his deconstruction of western logo-phono-centrism, Derrida proposed the idea that the metaphysics of presence is ultimately founded upon the illusion of 'hearing-oneself-speaking,' upon the illusory experience of the Voice as the transparent medium that enables and guarantees the speaker's immediate self-presence. [...] True, the experience of *s'entendre-parler* serves to ground the illusion of the transparent self-presence of the speaking subject. However, is not the voice *at the same time* that which undermines most radically the subject's self-presence and self-transparency? Not writing, which undermines the voice as it were from without, from a minimal distance, but the voice itself, one is tempted to say: the voice *as such* in its uncanny presence—I hear myself speaking, yet what I hear is never fully myself but a parasite, a foreign body in my very

³⁴ One is reminded of Lacan's 'Mirror Stage,' in which the seeing of oneself in a mirror (also a form of auto-affection) both establishes the subject and presents an unattainable imaginary ideal. Whereas for Derrida, the experience of hearing-oneself-speak is evidence of a subject which is always already divided, for Lacan, it is the seeing-of-oneself in a mirror that produces the division. See Derrida, *Speech and Phenomena and Other Essays on Husserl's Theory of Signs*, trans. David B. Allison (Evanston, IL: Northwestern University Press, 1973), 70-87; Jacques Lacan, "The Mirror Stage as Formative of the *I* Function as Revealed in Psychoanalytic Experience," in *Écrits*, trans. Bruce Fink (New York: Norton, 2006), 75-81.

heart. In short, voice is that on account of which 'I can't hear myself think,' so that the subject's basic plea to their voice is, 'Would you please shut up, I can't hear myself think!' This stranger *in myself* acquires positive existence in different guises, from the voice of conscience to the voice of the persecutor in paranoia. The voice's 'self-identity' resides in the fact that the voice *qua* medium of transparent self-presence *coincides* with the voice *qua* foreign body which undercuts my self-presence 'from within'.³⁵

It is perhaps through the inscription of recording (the acousmatic sound being the most "transparent" of media) that such an understanding of the voice can be most accurately realized. For Derrida, writing (whether with letters or with recorded samples) is the supplement to speech. For Žižek, the voice has the capacity to be its own supplement, to be in excess of itself. Thus, in *CDS*, the performer's voice, in foregrounding the material of the voice and divorcing this material from its 'natural' linguistic contexts, produces a vocal surplus that questions the self-identity of both voice and subject. Meanwhile, the recorded voice is alien to the speaker, and there are moments when the performer is drowned out and cannot hear himself, being overpowered by the foreign, excess voice that occupies the syntactic space of *CDS* like a parasite or 'virus'.³⁶

That dangerous narrative

Perhaps the most problematic aspect of *CDS*—and not problematic in that it introduces or realizes a slippery Derridean impossibility, but problematic in the sense that it quite literally undermines itself in what it seeks to accomplish—is the issue of narrative. *CDS* presents itself as a 'rehearsal' of the supplement, one in which "the performer acts out a futile search for the primary referent (or 'master signifier')." In this narrative, a subject moves through the aforementioned terrain of phonetic sounds, as if searching for an end to the chain of supplements, until eventually realizing "all that is to be found is an infinite hauntology, a spectral chain of traces, specters, and cinders." The performer essentially plays a character who, without

³⁵ Slavoj Žižek, *Interrogating the Real*, Rex Butler and Scott Stephens, eds. (London: Continuum, 2005), 237.

³⁶ One thinks again of Burroughs, and the 'virulence' of the supplement.

initially suspecting the impossibility of their task, sets out to find the origin of presence, the signifier which represents the subject for all other signifiers, the end of the chain.³⁷ This search is, of course, doomed to failure, and the narrative finds its resolution (or lack thereof) in the performer realizing their logocentric fallacy as they stare infinity head-on.

There is nothing wrong with such a narrative on the surface. It gives a dramatic trajectory to the piece, something tangible which the audience can grab ahold of as they follow the performer's movement toward (ir)resolution. However, earlier the question was asked, "How does one concretize a meaning which problematizes the very act of being present?" A narrative requires a goal, and a teleological trajectory toward that goal. Even if that goal is predetermined to be unachieved, the (un)climactic end-point itself becomes a sort of master-signifier bringing the piece together, acting as a centering presence. Rather than maintaining an existence like the endless chain of supplements that so frustrates the performer, or the modular series of components that make up the piece itself, *CDS* does, in fact, end up with a consistent center, a narrative arc that, in effect, "re-introduces the signifier in the back door."³⁸ The disparate pieces of the work are able to coalesce around an object which, in a way, negates the very concept it sought to manifest in the first place.³⁹

Are there any possible alternatives to this? One could imagine a piece without such a dramatic arc, where elements are arranged paratactically rather than hypotactically (i.e., not subordinated to one another). A more abstract, mobile, or open form could potentially accommodate for this. However, without the narrative, the piece runs the risk of losing the weight and severity of its material. A subject frantically searching through an infinitude of ghostly traces, reckoning with the sanity-testing electronic voices that do and do not belong to them, trapped in a tug-of-war with projected images that are both responding to and controlling

³⁷ Here we are mixing Lacanian and Derridean metaphors, but in a way that I hope is productive. For more on the Lacanian 'master-signifier,' see Lacan, "The Subversion of the Subject and the Dialectic of Desire in the Freudian Unconscious," *Écrits*, 671-702.

³⁸ This dilemma was pointed out by my colleague, composer Colin Tucker.

³⁹ It is certainly possible to do a reading of *CDS* which masks the narrative elements, but the dramatic trajectory would still be inscribed in the piece itself. Such a strategy would be one of concealing the narrative, not erasing it.

them, clearly communicates the schizophrenic nature of the supplement in a way that a more muted parataxis might be incapable of. It takes a subject to underline the horror of the "terrifying menace" of a divided subject.

Perhaps *CDS*'s chance for redemption lies here: where metaphysics fails to locate an original presence, *CDS* fails to perfectly defer it. The imposition of a narrative does not expunge the logic of the supplement, but, arguably, makes its work that much more subversive. The supplement refuses to be identified, to be forced into the present, to be made into an aesthetic object. It permanently slips behind the signifier. If the supplement is that which both violates signification and makes it possible, *CDS* is an instance of the latter taking place. In organizing a chain of supplements, the work inadvertently gives birth to a (still imperfect and always already divided) signified.

"...ce dangereux supplément..."

Here begins an overview of *CDS*, its syntactic, lexical, and narrative elements and how they work together as a 'whole'. What follows is, in a way, both a self-analysis and a record of composer intention. It is written with the understanding of the fallacy of what it attempts to achieve (interpreting the intention of an author who is no longer present). Additionally, one feels the obligation to note that, like any work of art, the piece strives to be appreciated on its own aesthetic merits, and while the extra-musical elements (the rehearsal of the supplement, the search for the master-signifier, the preoccupation with vocal inscription) are certainly important aspects of the work, its appreciation should not be reliant on such ultimately peripheral matters.

(tras)

The 'first' of the three phonetic studies is *(tras)*, which was composed in April 2014, and premiered at *An Excess of Voice*, a collaborative concert between the Buffalo-based contemporary music ensemble, Wooden Cities, and sound poet, Steve McCaffery (Pausa Art House, April 19, 2014).⁴⁰ The first performance with electronic accompaniment took place at the

⁴⁰ I should take this opportunity to again thank Dr. McCaffery not only for his participation in this concert, but for his insights and influence. Engaging with him both in conversation and through his scholarly work has had a significant impact on my own written and musical work over the past few years.

INTIME symposium at Coventry University (October 19, 2014), and the first performance with projections was at the full premiere of *CDS* at the 2015 Digital Poetry and Dance event.

The work's title renders the French word 'trace' in IPA letters, and then encloses this notation in parentheses to emphasize the nature of the title as supplement to the work itself (like parenthetical asides, titles are supplementary in that they both are and are not part of the work to which they are appended). The *trace* is a Derridean concept connected to those of the supplement, force, and *différance*. Related to Saussure's notion of the 'arbitrariness of the sign' is the conception of language as a 'system of differences'. This is most clearly apparent at the level of the phoneme, the smallest perceptually distinct unit of language.⁴¹

Linguistic signals are not in essence phonetic. They are not physical in any way. They are constituted solely by differences which distinguish one such sound pattern from another. Each language constructs its words out of some fixed number of phonetic units, each one clearly distinct from the others. What characterises those units is not, as might be thought, the specific positive properties of each; but simply the fact that they cannot be mistaken for one another. Speech sounds are first and foremost entities which are contrastive, relative and negative. [...] *In the language itself, there are only differences.*⁴²

The only significant value of [t] (both the sound and the letter), is that it can be differentiated from [b]. We can see/hear the difference between 'book' and 'took', but the difference is arbitrary and is dependent on a negation, a difference. Derrida elaborates this idea into the concept of the trace:

Whether in the order of spoken or written discourse, no element can function as a sign without referring to another element which itself is not simply present. This interweaving results in each 'element'—phoneme or grapheme—being constituted on the basis of the

⁴¹ Indeed, as later linguists such as Roman Jakobson would critique Saussure, this is *only* apparent at the level of the phoneme. See Mladen Dolar, *A Voice and Nothing More* (Cambridge: MIT Press, 2006), 18.

⁴² Ferdinand de Saussure, *Course in General Linguistics*, trans. Roy Harris (London: Bloomsbury, 2013), 139-140.

trace within it of the other elements of the chain or system. This interweaving, this textile, is the text produced only in the transformation of another text. Nothing, neither among the elements nor within the system, is anywhere ever simply present or absent.

There are only, everywhere, differences and traces of traces.⁴³

If the only value of [t] is its difference from [b] (and, simultaneously, all other phonemes), then whenever [t] is "present," in a way, all the elements from which it differs still retain a spectral presence (as Saussure said, they are "not physical", one might say they are non-corporeal). Just like the supplement, the trace is not really present or absent; and also like the supplement, it creates an endless succession that problematizes the idea of presence itself. If everything within the system is marked by difference, then everything becomes a trace of another trace.

It is this logic, along with the logic of the supplement, that is at work in (*tras*). (*tras*) is a dialectic composition, which explores the metaphysical paradox of the supplement through the specific binary of linguistic articulation (consonants) and voiced accent (vowels). This is an opposition Derrida finds in Rousseau's "Essay of the Origin of Languages," a text in which Rousseau praises primal languages for being more expressive, melodious, and less "precise," and laments the development of "enlightened" languages, which are less passionate, and bogged down by reason. One of the key differences between primal language and modern language, for Rousseau, is the prevalence of consonants, which add precision at the expense of passion. Rousseau says of the Ur-language, "As natural voices are unarticulated, words would have few articulations; a few interposed consonants eliminating the hiatus between the vowels would suffice to make them flowing and easy to pronounce. [...] one would sing it rather than speak it."⁴⁴ However, just as writing supplements speech in dangerous ways, so too does articulation have corrupting effects.

⁴³ Derrida, *Positions* (Chicago: Chicago University Press, 1981), 26. Here we are again reminded of Isou's hypergraphics in which "each element exists in so far as it allows one to imagine another element which is either nonexistent or possible." It turns out that Isou did not have to invent this quality, it was always already present in the standard alphabetic lexicon.

⁴⁴ Jean-Jacques Rousseau, "Essay on the Origin of Languages," in *Essay on the Origin of Languages and Writings Related to Music*, trans. and ed. John T. Scott (Lebanon, NH: University Press of New England, 1998), 295-96.

As enlightenment extends, language changes character; it becomes more precise and less passionate; it substitutes ideas for feelings, it no longer speaks to the heart but to reason. As a result, *accent is extinguished, articulation extends*, language becomes more exact and clearer, but more drawn out, more muted, and colder.⁴⁵

Derrida, however, points out that the very necessity of articulation to "eliminate the hiatus between the vowels" is the point at which language itself originates. Thus, once again, the supplement locates itself at the origin, making possible the very thing it corrupts.

A speech without consonantic principle, what for Rousseau would be a speech sheltered from all writing, would not be speech; it would hold itself at the fictive limit of the inarticulate and purely natural cry. Conversely, a speech of pure consonants and pure articulation would become pure writing, algebra, or dead language. The death of speech is therefore the horizon and origin of language. But an origin and a horizon which do not hold themselves at its exterior borders. As always, death, which is neither a present to come nor a present past, shapes the interior of speech, as its trace, its reserve, its interior and exterior *différance*: as its supplement.⁴⁶

It is this supplement that is at the core of (*tras*), and the piece unfolds as a dialectic between consonant and vowels, traversing the spectrum from dead algebra to purely natural cry. In the score, this is graphically represented in the two colors of ink: black for unvoiced consonants, and red for vowels and voiced consonants. With the exception of the last section, every inscription in the score takes one of these colors to denote both the physical fact of laryngeal phonation, as well as the audible (and visual) dialectic between these opposing elements. Admittedly, this division between voiced/unvoiced is not exactly the same as the division Rousseau refers to between articulation and accent. (*tras*) deliberately groups voiced consonants with sustained vowels. This is mostly due to the fact that in spoken language, there is *not* a clear binary between articulation and vowel (take, for instance approximants like [l]), and in the vocal

⁴⁵ Ibid., 296, emphasis added.

⁴⁶ *Of Grammatology*, 315.

apparatus itself, the more abrupt distinction is between laryngeal phonation and its absence. This also reinforces Derrida's observation that such distinctions "do not hold themselves at exterior borders," and how, in a very concrete sense, the accent's trace is often quite literally present within the articulation (as in voiced consonants).

(*tras*): exposition

The opening section of (*tras*), its exposition, introduces the main phonetic material the piece will reckon with, as well as introducing the aforementioned dialectic. The exposition consists of a four-stanza sound poem, notated almost entirely in standard IPA letters (the only non-IPA symbols being the arrows which represent smooth transitions from one sound to another, the elevated commas which represent brief breaks or breaths, and the triangular fermata (\wedge), which denotes a brief prolongation of a sound.

The first stanza consists almost entirely of unvoiced consonants, crafting a series of five quick gestures of dead, algebraic music. This rhythmic mix of plosive stops, fricatives, trills, and non-pulmonic clicks ultimately culminates in (or, one might say collides with) the piece's first 'accent,' the open-mid back unrounded vowel (Λ).

t t s p k |
t t s p k | \widehat{ts}
 \widehat{ts} p t t k Θ p q \hat{f} ?
s \rightarrow r p p t k Θ q ||
p p t k ' t k θ p p \int ! Λ "

Fig. 4: (*tras*), stanza 1

The second stanza begins to see alternation between consonants and vowels, and introduces pitched phonation into the piece, notated with the tone diacritics on each vowel, (\bar{e} , λ , \bar{o} , \bar{i} , etc.).⁴⁷ The first two lines of stanza two contain important expository material which will

⁴⁷ While the tone diacritics denote a change in the pitch of the vowels, pitch, of course, has been a part of the piece since the first phoneme of the first stanza. Each vocal sound, whether vowel or consonant (i.e., harmonic or inharmonic), has a unique series or bandwidth of frequencies, and, when strung together with other phonemes, creates a melody with an identifiable pitch contour. This is one of the main contentions of this piece, and my work in general, that [pptk] is as melodious as [la la la].

return later in the piece. The stanza ends with the first of many meditations on the sibilant alveolar fricative [s], here alternating between its unvoiced and voiced ([z]) versions.

t k p q ē t || ʌ
 r t p | ! ǒ t̃f̃ ī k p t p ʌː t k aː
 sZ.....ZZ.....Z.....Z.....→ ||

Fig. 5: (*tras*), stanza 2

Stanza three continues this development, with the proper introduction of several voiced consonants (e.g., [m], [l], [d], etc.) and a full dialogue between voiced/unvoiced elements. The second line is a restatement of the third line from stanza 1 ([t̃s p t t k ʌ p q f]), with several of the unvoiced consonants replaced with voiced iterations. The stanza is bookended with two lines which are palindromes of one another, adding a symmetrical arc to its form.⁴⁸

m k̃s z p t l k
 t̃s p d d k ʌ p G f →
 v q b ! g t t b d̃r̃z
 k l t p z s̃k m

Fig. 6: (*tras*), stanza 3

The fourth and final stanza begins a transitional movement to the articulation of an actual 'word,' specifically "trace" ([tras]). As individual phonemes from the word are gradually introduced ([t] [s] [ra] [tra]), in the midst of a stuttering and increasingly disjunct texture, the section ascends toward its apex. Just as the first stanza explored a terrain of unvoiced consonants before stumbling into a vowel, the fourth stanza scurries through a dense underbrush of linguistic sounds before colliding with a fully-formed sign—but one whose signified is as ghostly and problematic as the prior succession of non-referential phonemes.

⁴⁸ While it has little to do with the specific issues of the Derridean trace or supplement, the phonemes in these two palindromic lines have a specific source: the name of the character Mr. Mxyzptlk, an impish villain in the DC Comics universe who can only be defeated when the hero forces him back to his home dimension by tricking him into saying or spelling his own name backwards. While this reference was merely a way to generate material in this section, it is not without its intersections with Derridean thought, particularly the idea of the proper name as violent inscription, and/or the problem of the proper name itself (as a particular demarcation of presence) which Derrida has addressed in numerous texts, and which is peripherally addressed in (*spektv*).

t s s t **ā** t **Ra** **ts**
z d d s k **ā** **Λ** t
 p p t k **ts** 'f→**z** t**Ra** d
 s t **sa** **sRa** **Θ** t **ε** t**Ras**

Fig. 7: (*tras*), stanza 4

It is perhaps worth addressing here one of the ways this piece disrupts the ideas of both Saussure and Derrida: in presenting phonetic material outside of a linguistic context—indeed, in a specifically *musical* context—the phonemes are no longer of purely negative, differential value. Being organized and appreciated purely for their sonic characteristics, they do take on a positive, and non-differential value: while [t] is only linguistically useful in its difference from [b], [t] has musical merit of its own, and in a sonic space, it *does* take on 'physical' attributes (e.g., its qualities as plosive consonant with a particular bandwidth of inharmonic frequencies can be appreciated acousmatically as an *objet sonore*, without reference to other sounds, i.e., phonemes). This does not obliterate the fact that it is still a linguistic sound (and as such, a purely acousmatic listening is perhaps out of reach for most humans), it merely creates a gap between a musical and linguistic hearing. While [t] will always, in a linguistic or musical context, contain traces of [b], in a musical context, it begins to take on some corporeality, a corporeality which inserts some space—a *différance*?—between it and its traces.

However, what little corporeality is attained is disturbed by the exposition's electronics and projections. While there are only two electronic cues in this first section, both reinforce the presence of the other elements in the system which themselves are "not simply present." The first cue, which begins on the third line of the first stanza (0:07 in the studio recording), consists of a single phoneme being delayed, panning between the speakers, creating a sense of the depth of the system and presenting a spectral representation of these other elements' traces.⁴⁹ Likewise the second cue, which connects the third and fourth stanzas (0:54-1:02), consists of a cluster of ten sine waves at various frequencies between 5-10 kHz. These frequencies are those that are

⁴⁹ This delayed fragment will appear again later in the piece, therefore, in its foreshadowing of a later event, it becomes a trace of a trace.

most strongly resonant during the pronunciation of the [s] sibilant. However, in isolating only a few partials of the [s] sound, one hears not the [s] itself, but its trace, a ghostly apparition that calls to mind the [s], evoking it in memory, making it present in its absence.

The projections for the exposition consist simply of rapid-fire successions of IPA symbols. This amounts to the illusion of the voice 'writing' on the screen. While in an isolated sonic environment, the phonetic sounds could perhaps be appreciated as *objet sonores* instead of phonemes, the visuals force the listener to recognize them as linguistic elements, and the rapid-succession of images reinforces the notion of a system of differences, as each symbol is only useful in that it represents the currently sounding phoneme, disappearing only to be replaced by another symbol whose only value is its contrastive relationship to the previous symbol.

(tras): P-cloud

The second section of (*tras*) is the aforementioned 'p-cloud', with its open cluster of phonemes (see Fig. 2). The p-cloud continues the consonant/vowel dialectic through an extended meditation on voiced and unvoiced labiodental plosives (i.e., stop consonants articulated with the lower lip and the upper teeth), or [p] and [b].

While there are many possible interpretations of the p-cloud, we'll analyze this section as if it unfolds from left-to-right. The p-cloud begins with an alternation of [p] and [b], the same plosive sound being articulated with/without the voice. Eventually other, related phonemes are introduced, including the bilabial click [ǀ] and bilabial trill [ʙ], effectively making the p-cloud a study of sounds made with/at the lips.

Just as the last stanza of the exposition saw a movement toward the 'word' [tras], the majority of the p-cloud's duration is a transition from the lip-sounds to the French word 'supplément' [sypl̥emɑ̃]. This begins via an appending of the alveolar approximant ([l]) to [p] and [b] (i.e., [p̥l̥] and [bl̥]), which then moves toward the introduction of the remaining phonemes ([s], [m], [y], [e], [ɑ̃]) in various combinations. Unlike with the utterance of "[tras]", the p-cloud does not arrive at a full articulation of the word in question, but at an incomplete one: "[p̥l̥emɑ̃]". While the performer has the option of articulating the full word (there are many instances of the

first syllable, "[sy]," in the vicinity of the final "[p̂lemã]"), the final utterance is always removed from the p-cloud's overall meditation, even if by a hair's breadth.

The result is that the final "[p̂lemã]" effectively 'supplements' the p-cloud, being part of it—even completing it—but remaining outside. The p-cloud limits its meditation to one-syllable sounds, and [p̂lemã], as a two-syllable utterance, is external to this lexicon while remaining part of the overall meditation on the phonemes that comprise 'supplément'. This idea is reinforced by the electronics. The p-cloud's electronic cues consist of a few scattered, delayed labial consonants, contributing to the 'cloud-like' sense of the texture, and adding depth to the live performance. When performed with electronics, however, the final "[p̂lemã]" is spoken not by the performer, but by a recorded voice. This recorded voice reinforces the supplementary nature of this utterance, making it feel more external and prosthetic. The p-cloud is incomplete without this final exclamation, and yet this exclamation does not belong.

This sense is further supported through the visual projections, which simply trace a path through the cloud, adding individual letters and assembling the p-cloud gradually from left to right. When the supplementary "[p̂lemã]" appears, however, the rest of the p-cloud disappears, underscoring their separation from one another, and increasing the sense of the final utterance being affixed. This separation is both a tiny gap ("[p̂lemã]" appears within close proximity to the last symbol to appear onscreen) and a huge void ("[p̂lemã]" cannot appear onscreen alongside those symbols, residing on its own individual plane). It obliterates the other symbols while completing them, corrupting them while complementing them.

(*tras*): Vowel chart

The third section of (*tras*) is the first to focus almost exclusively on vowels. Referred to as the 'vowel-chart', this section uses as its framework the quadrilateral grid used to show the location of vowel articulation in the IPA. Superimposed on this grid is a series of gestures drawn in red ink (since all vowels are voiced). The performer is free to perform these gestures as written or to use them as a suggestion for improvisation.

Vowels are articulated along a two-dimensional axis in the mouth: a vertical axis which determines the 'height' of the vowel (referring to the placement of the tongue, where open vowels are the result of the tongue being in a lowered position—as in [a] or [ɑ]—and close vowels result from the tongue being raised—as with [i] or [u]); and a horizontal axis which determines the 'backness' of the vowel (referring again to tongue placement, where front vowels are the result of the tongue being towards the front of the mouth—as in [i] or [a]—and back vowels result from the tongue being moved to the back—as with [u] or [ɑ]). The official IPA vowel map is shown in Fig. 8. Where there are pairs of vowels separated by a •, the vowel on the left is unrounded (i.e., produced without rounded lips, as in [i] or "ee"), while the one on the right is rounded (as in [u] or "ooh").

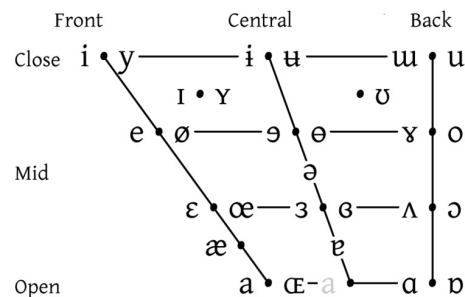


Fig. 8: IPA vowel chart

The placement of the vowels determines the frequency of the formants produced. Formants are points of resonance in the vowel's harmonic spectrum, which result from the vocal cavity shaping and filtering the sound. Vowels are recognized and differentiated by the position of their formants, particularly the first two formants, usually labeled F_1 and F_2 . F_1 is determined by vertical position, with a formant ranging from ~200 Hz for closed vowels, to ~1500 Hz for open vowels. F_2 is determined by horizontal position, with a formant ranging from ~500 Hz for back vowels, to ~3000 Hz for front vowels. While the first two formants are the most important for the perception of discrete vowel sounds, most vowels will have three or more formants.⁵⁰

The above explanation reveals that as the tongue moves around in the mouth, one can produce a smearing or glissando between the formants, yielding an effect not unlike that of

⁵⁰ For a more detailed overview of formant acoustics, see Ken Lodge, *A Critical Introduction to Phonetics* (London: Continuum, 2009), 190-205.

changing the cutoff frequency of two or more resonant filters. This effect of smooth transition from one vowel placement to another can be heard in diphthongs or 'gliding vowels' (e.g., [eɪ] or [aʊ]), and, with extremely focused control exerted on tongue placement and vocal resonance, is the fundamental technique underlying diphonic overtone singing (as in Tuvan throat singing or Mongolian *khöömii*).

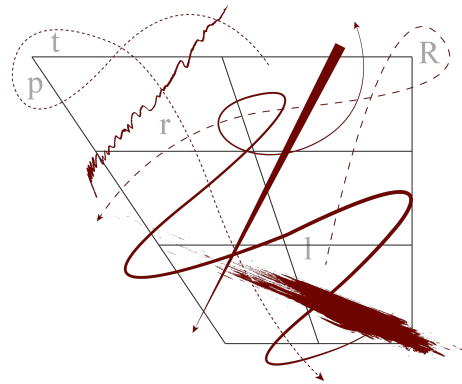


Fig. 9: (*tras*), vowel chart

It is this idea of gliding between vowel placements and producing smooth formant changes that (*tras*)'s vowel chart focuses on. The gestures inscribed across the chart trace the movement of the tongue through the mouth, producing melodic formant changes. The character of these melodies is denoted by the nature of the drawn line: a narrow, focused melody is perhaps implied by a thin graceful line, while a more haphazard gesture is implied by the more aggressive or broadly drawn lines. The few scattered consonants, appearing on the chart at their relative positions of articulation (e.g., [t], [p], [R]), can act as optional interruptions or punctuations to these vowel melodies.

The visual projections for this section simply trace these melodic lines on the screen as they are produced by the performer, creating—like in the exposition—a close alignment between the images onscreen and the gestures being sung. The electronics consist of a single cue of delayed labial sounds occurring after a particularly abrupt gesture, recalling both the p-cloud section (in which the same cue appeared), and the first cue of the exposition.

(*tras*): Recapitulation

After the vowel chart, (*tras*) moves into a recapitulation of the opening sound poem. In this section, several lines of the expository poem are repeated almost verbatim, with simple but significant changes.⁵¹

The recapitulation's first two lines are a repeat of the exposition's second stanza, the section in which the dialectical alternation between consonants and vowels began. Here, that stanza's first two lines appear nearly unchanged, save the addition of triangular fermati over the vowel sounds. The result is that the 'accents' are all extended, asserting themselves more forcefully while also adding rhythmic interruptions, yielding a stuttering effect. These lines end, like in their original appearance, with a sustained sibilant [s]—though here, rather than alternating with its voiced manifestation, it is sustained for an extended duration (marked by the rectangular fermata). This prolonged meditation on [s] becomes a complement not only to the [s→z] gesture from the exposition's second stanza, but more significantly, refers back to the electronic cue that bridges the third and fourth stanzas. In fact, when performed with electronics, this sustained [s] is accompanied by a similar cluster of sustained sine waves in the sibilant range. The performer is put in the position of trying to harmonize the live [s] sound with the electronic sine wave cluster, that is, trying to harmonize a phoneme with (one of) its trace(s).

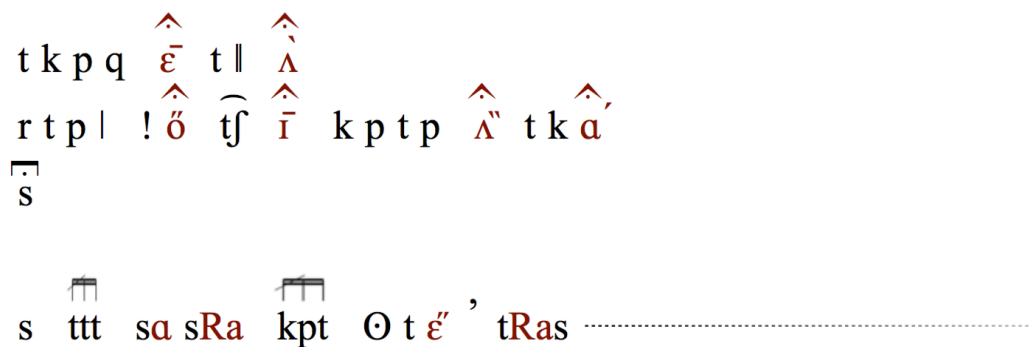


Fig. 10: (*tras*), recapitulation

⁵¹ Likewise, the visual projections here recall the exposition's rapid successions of IPA symbols, continuing the effect of the voice 'writing' on the screen.

The recapitulation's final line references the final line of the exposition, in which the poem moves toward its articulation of the word "trace". This time, rather than adding fermati over the voiced sounds, a few quickly articulated consonants have been added. The first [t] has been repeated twice, with a slashed grace-note beam above the letters indicating a fast-as-possible articulation, and a new gesture has been inserted between the "[sra]" and bilabial click [ɔ], a speedy [kpt] (recalling the quick articulations of these three phonemes throughout the piece), which carries the same grace-note notation. This line's increased energy climaxes in the articulation of "[tras]"; however, rather than being the final sound into which the preceding section collides, this ultimate articulation is the launching pad for the piece's final section.

(*tras*): Coda

(*tras*)'s coda is perhaps where the aforementioned narrative asserts itself most forcefully. Having traversed several fields of phonemes in which voiced sounds and their supplements continue to undermine each other at every turn, revealing a differential network of negative signifiers and their traces, the performer arrives at the (anti)climactic realization that, to return to Derrida's words, "Nothing, neither among the elements nor within the system, is anywhere ever simply present or absent," and that there is no master signifier, but rather, "there are only, everywhere, differences and traces of traces." The coda is thus a frustrated and quasi-psychotic recitation of what the performer has discovered, an infinite chain of "traces of traces of traces...", or, in French, "des traces de traces de traces...".⁵² The performer is reduced to a frantic repetition of this unending phrase at a maddened pace.

Such an exasperated recitation recalls the uncanny agony Žižek claimed the voice is capable of provoking ("Would you please shut up, I can't hear myself think!"), and all the coda's supplementary media (score, visuals, electronics) underscore this understanding of the voice. The electronics present a myriad of additional voices reciting the same phrase, like auditory hallucinations reinforcing not only that each trace is a trace of a trace, but that each utterance of the phrase "des traces de traces..." is itself a trace of another trace. The visuals consist of this

⁵² Thanks to Cort Lippe for his help in clarifying the French grammar in this translation.

phrase scrolling across the screen simultaneously in various directions at various speeds, while the score does its best to imply such movement statically, by fading in/out various textual inscriptions of the phrase, implying movement—appearance/disappearance—where there is none.⁵³ The psychosis instigated by the revelation of the infinite chain of traces begets a succession of auditory and textual voices that, recalling Žižek, 'undermine the subject's self-presence like a parasite or a foreign body.'



Fig. 11: (*tRas*), coda

This narrative conclusion emphasizes (*tras*)'s ability to exist as a standalone piece, as its denouement is the same arrival point at which *CDS* as a whole ends up. We'll see, upon consideration of the other studies, that each in its own way stumbles upon a similar (anti)climax, and therefore each piece can exist independently or act as a narrative conclusion.

(spektv)

The 'second' of the three phonetic studies, (*spektκ*) was composed in January 2015 and first performed at the full premiere of *CDS* at the 2015 Digital Poetry and Dance event. The work's title renders the French word 'spectre' in IPA letters, enclosing them in parentheses as was done in the previous study (to emphasize supplementarity). The *spectre* for Derrida, is another

⁵³ The score was actually produced long before the commissioning of the kinetic projections, so it is interesting to note that this gesture called out for a graphical approximation of animation before animation was ever suggested.

term in the chain of 'nonsynonymous substitutions' for the "nonpresent remainder",⁵⁴ referring to the same presence/absence problematic evoked by 'trace', 'différance', 'supplement', etc.

Derrida's most well known use of 'spectre' comes from his 1993 text, *Specters of Marx*, which evokes the opening to Marx's *Communist Manifesto*: "A specter is haunting Europe."⁵⁵ While the political thesis of this text moves beyond the scope of *CDS*, it is significant in that it introduces another Derridean term of some importance (and notoriety): 'hauntology.' This widely recognized term, Colin Davis explains, "supplants its near-homonym ontology, replacing the priority of being and presence with the figure of the ghost."⁵⁶ Or, in Derrida's words:

[the nonpresent remainder] is neither living nor dead, present nor absent: it spectralizes. It does not belong to ontology, to the discourse on the Being of beings, or to the essence of life or death. It requires, then, what we call [...] *hauntology*. We will take this category to be irreducible, and first of all to everything it makes possible: ontology, theology, positive or negative onto-theology.⁵⁷

It is this idea of haunting, of a present absence constantly at work in language, that is central to *CDS* and to (*spektv*) in particular. It is a hauntology that drives the performer to psychosis at the end of (*tras*), and it is this same discourse of absence that is at work in (*spektv*).

However, while (*tras*) acted out a rehearsal of the titular trace, (*spektv*) takes neither the spectre nor hauntology as the concept it actively rehearses at its surface, but is instead an enactment (setting) of the related idea of 'iterability'.⁵⁸ 'Iterable' is a Derridean portmanteau with roots in the Latin 'iter' ('again') and Sanskrit 'itara' ('other'), and is meant to illustrate the

⁵⁴ Derrida, "Signature Event Context," trans. Alan Bass, in *Limited Inc.* (Evanston: Northwestern University Press, 1988), 10.

⁵⁵ Karl Marx and Friedrich Engels, "Manifesto of the Communist Party," trans. Samuel Moore (Oxford: Oxford University Press, 2008).

⁵⁶ Colin Davis, "Hauntology, Spectres and Phantoms," *French Studies* 59, No. 3 (2005), 373.

⁵⁷ Derrida, *Specters of Marx: The State of the Debt, the Work of Mourning and the New International*, trans. Peggy Kamuf (New York: Routledge, 1994), 63.

⁵⁸ The titular spectre does, of course, haunt the study throughout.

repeatability and alterity on which language depends.⁵⁹ This concept is clearly apparent in writing, which relies on a certain repeatability: in order for writing to be effective, it must be able to be deciphered in the absence of both the author and/or the intended recipient:

The possibility of repeating and thus of identifying the marks is implicit in every code, making it into a network that is communicable, transmittable, decipherable, iterable for a third, and hence for every possible user in general. To be what it is, all writing must, therefore, be capable of functioning in the radical absence of every empirically determined receiver in general. [...] For a writing to be a writing it must continue to "act" and to be readable even when what is called the author of the writing no longer answers for what he has written, for what he seems to have signed, be it because of a temporary absence [or] because he is dead.⁶⁰

A written text must be repeatable, that is, able to be deciphered time and again in future readings by various receivers. Even at a more microscopic level, a text consists of signifiers, which are themselves repeatable elements that are only identifiable in their ability to be reiterated, even—especially—in the absence of their signified. "A written sign [...] is a mark that subsists, one which does not exhaust itself in the moment of its inscription and which can give rise to an iteration."⁶¹

However, such signs are not only repeatable, but changeable in their iterability: a text can be repeated in varied contexts which can alter its meaning. Indeed, every act of deciphering a text is an act of recontextualization, as the circumstances surrounding the communication will transform its interpretation.⁶² However, this notion of recontextualization implies an originary context in which the text can be 'properly' interpreted (i.e., in which the author's intention can be fully grasped). Derrida calls this idea into question.

⁵⁹ Derrida, "Signature Event Context," 7.

⁶⁰ Ibid., 8. N.B. the author of this quotation died in 2004.

⁶¹ Ibid., 9.

⁶² Reread the opening paragraph of this paper, it will surely carry an altered meaning (however subtle) compared to when you first read it.

This problematic relationship between iterability and context is best elucidated with reference to Derrida's critique of J. L. Austin's speech act theory. Austin differentiated 'constative' utterances (those that assert a statement of fact) from 'performative' utterances (those that perform an action). Examples of performatives include marrying ("I do"), betting ("I bet you twenty dollars I will win the race") or knighting ("I dub thee Sir Richard").⁶³ According to Austin, a performative can succeed or fail, and will succeed only when uttered under the appropriate circumstances (for instance, if I announce a bet after the race is over, it fails because this is not deemed an appropriate circumstance for making a bet).⁶⁴ The risk of such failures Austin terms 'infelicity.' In addition to infelicities, there is a further risk complication Austin refers to as 'etiolation':

A performative utterance will, for example, be *in a peculiar way* hollow or void if said by an actor on the stage, or if introduced in a poem, or spoken in soliloquy. [...] Language in such circumstances is in special ways—intelligibly—used not seriously, but in ways *parasitic* upon its normal use.⁶⁵

Such non-serious, abnormal performatives do not succeed because that was never the speaker's *intention*.

Derrida recognizes a logocentric fallacy in this reference to 'parasitic' language, and locates a supplementary relationship: the etiolated performatives supplement the 'normal' use of such utterances. He points out that rather than being an exception, or a risk, etiolation is based on the iterability that language itself depends.

[O]n the contrary, is this risk rather its internal and positive condition of possibility? [...] For, ultimately, isn't it true that what Austin excludes as anomaly, exception, "non-serious," *citation* (on stage, in a poem, or a soliloquy) is the determined modification of a general

⁶³ J. L. Austin, *How to Do Things with Words* (Oxford: Clarendon Press, 1962), 5-6.

⁶⁴ *Ibid.*, 14.

⁶⁵ *Ibid.*, 22.

citationality—or rather, a general iterability—without which there would not even be a "successful" performative?⁶⁶

The reference to citation is key, both to Derrida's argument and to its eventual manifestation in *CDS*. Any text or speech act can be cited, or quoted, in a new context by a new speaker. Furthermore, texts can be excised from their original contexts and 'grafted' into new (con)texts. Just as there can be traces of traces, there can be infinite chains of citations of citations, quotes of quotes, grafts of grafts—indeed, language is dependent on such structures. Derrida's contention is that, just as the supplement corrupts the very thing it makes possible, iterability makes the speech act possible, but also creates the risk of its etiolation. Iterability will always problematize the elements on which the performative is dependent—context and intentionality—by de-centering them, keeping their full 'presence' at bay:

In such a typology, the category of intention will not disappear; it will have its place, but from that place it will no longer be able to govern the entire scene and system of utterance. [...] The first consequence of this will be the following: given that structure of iteration, the intention animating the utterance will never be through and through present to itself and to its content. [...] Likewise, this essential absence of intending the actuality of utterance [...] prohibits any saturation of the context. In order for a context to be exhaustively determinable, in the sense required by Austin, conscious intention would at the very least have to be totally present and immediately transparent to itself and to others, since it is a determining center of context.⁶⁷

A speech act can be taken 'out of context,' masking or violating the intention of the speaker. But *any* act of speech or writing is, in effect, a quotation or graft with, at best, an only partially present intention. As Derrida says elsewhere: "To write means to graft. The graft is not something that happens to the properness of the thing. There is no more any thing than there is any original text. [...] Each grafted text continues to radiate back toward the site of its removal,

⁶⁶ Derrida, "Signature Event Context," 17.

⁶⁷ *Ibid.*, 18.

transforming that too, as it affects the new territory."⁶⁸ Every utterance of a sign refers to some earlier use of that same sign, but there is no originary articulation to which all subsequent uses point, rather, the sign is always already differed, always a citation containing a trace of some absent referent. This sense of the iterable citation as a graft, haunted by all its possible intentions and contexts, is the starting point for *(spektk)*'s setting.

***(spektk)*: Stanzas**

(spektk) opens with a three-stanza sound poem, which introduces both the piece's main phonetic material as well as the first part of the iterability setting. Each stanza has a similar formal outline: opening with a syllable of the word 'iterable' notated in IPA symbols ([it-ter-abl]). The latter part of this syllable is repeated multiple times, evoking the signifier's inherent repeatability. After a line of phonetic poetry culminating in an ingressive vowel (notated as a letter preceding a [↓]), this syllable continues its repetition in the stanza's third line. The first



Fig. 12: *(spektk)*, stanza 1

⁶⁸ Derrida, *Dissemination*, trans. Barbara Johnson (London: Athlone Press, 1981), 355.

half of each stanza ends after a second line of phonetic poetry, also arriving at an ingressive vowel. Each stanza is then reflected across a divider, appearing in a quasi-retrograde formation on the other side. This retrograde version contains the stanza's lines in reverse order (4, 3, 2, 1), with a substitutional operation applied to the lines of phonetic poetry. Each stanza ends with the excised syllable from 'iterable,' appearing in an unabbreviated form.

The aforementioned substitutional operation is based in another concept related to Derrida's critique of Austin. In an essay entitled "Reiterating the Differences," the American philosopher John Searle made several rebuttals against Derrida.⁶⁹ While there is not space here to examine these in detail, one of Searle's claims is worth pointing out: what Derrida framed as a novel concept (iterability) was understood by linguists to be a commonplace phenomenon called the type-token distinction. This distinction exists between descriptive abstract concepts and their specific instantiations. For instance, Beethoven's Fifth is a *token* of the *type* named 'symphony'. For Searle, iterability is possible not because of any inherent problematic of presence, but simply because for any type, there can be many—indeed, an infinite—number of tokens.⁷⁰

Derrida replied to Searle in an extended essay called "Limited Inc a b c...", whose arguments will not be dealt with here.⁷¹ However, this insertion of the type-token distinction into the Derridean account makes its way into (*spektB*) via a compositional operation. The majority of phonetic material in each stanza comes from phonemes that are present in the words 'token' ([token]) and 'type' ([taɪp]).⁷² Like (*tras*), (*spektB*)'s score is written in two different

⁶⁹ John Searle, "Reiterating the Differences: A Reply to Derrida" *Glyph* 1 (1977), 198-208.

⁷⁰ An elegant response to Searle's disagreement vis-à-vis the type-token distinction is articulated by Marian Hobson: "[Searle's] use of the token/type distinction [...] produces no account of change in meaning, since while rules govern speech acts, linking type to token, there seems no way within the account for a reverse movement, for token acts to change rules, though they undoubtedly do. For that to happen, the token act has to be retrospectively treated as type, its deviation retrospectively cancelled. [...] Iterability in Derrida's article is a process which is one of change [...]. To be repeatable is to be alterable." Marian Hobson, *Jacques Derrida: Opening Lines* (London: Routledge, 1998), 98.

⁷¹ The Searle-Derrida debate has been observed to be one of the twentieth century's more significant points of conflict between analytic and continental philosophy, and is one that yielded both informative discourse and petty personal attacks.

⁷² The inclusion of these terms in the lexicon of (*spektB*) is not meant to signify any allegiance or sympathy to Derrida or Searle in their (in)famous debate, but is introduced as a way to generate relevant phonetic material. The phonemes required by 'token' and 'type' have already played significant roles in (*tras*)—especially, [t], [k], and [p]—and will continue to be emphasized in this study.

shades of ink, but rather than black and red, the colors are black and blue. Instead of being used to differentiate voiced from unvoiced sounds, the colored ink in (*spekt*) is used to denote phonemes that appear in the words 'token,' 'type,' or 'iterable'.

When each stanza is reflected across the divider, the black phonemes remain the same while the blue phonemes undergo a substitutional operation. The phonemes that appear in 'token' are exchanged for those that appear in 'type,' according to the following algorithm: any appearance of a non-initial consonant from one word is replaced with a non-initial consonant from the other (e.g., [k] and [n] are always replaced with [p]; [p] is replaced with either [k] or [n]). The same exchange is applied to vowels and initial consonants (the latter of which don't end up changing since both words begin with [t]). To emphasize this exchange further, each stanza is divided into a 'token' half and a 'type' half, with one part utilizing exclusively 'token' phonemes and its reflection utilizing exclusively 'type' phonemes.⁷³

	Token	Type
Initial consonant	[t]	[t]
Non-initial consonant(s)	[k], [n]	[p]
Vowels	[o], [ε]	[a]

Fig. 13: 'token' / 'type' exchange

This can be seen, for example, in the second stanza, which opens with the middle syllable of 'iterable' ([*t̃er*]), and then moves into a line of phonetic poetry privileging phonemes from 'type' ("[*t̃er t p a p s t m g ʌ ŋ s p a p t...*]"). After a repetition of the [*t̃er*] syllable and a second line of phonemes, the poem is reflected across the divider. Here, the fourth line is repeated, with the [*a*]s replaced by [*o*]s or [*ε*]s, and the [*p*]s substituted for [*k*]s and [*n*]s. The line of iterated [*t̃er*]s returns, followed by the stanza's second line with the same substitutions enforced ("[*t̃er t k ε n s t m g ʌ ŋ s k o k t...*]"). (Note that the blue phonemes from the word 'iterable' remain unchanged). These substitutions are not simply a calculated method of varying material, but are

⁷³ Stanzas 1 and 3 begin with a 'token' half, reflecting to a 'type' half; Stanza 2 begins with a 'type' half, reflecting to a 'token' half.

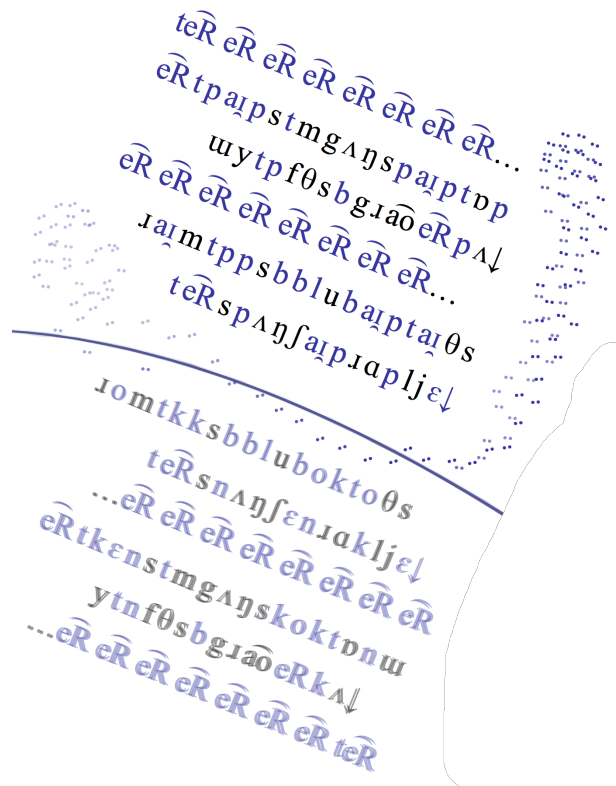


Fig. 14: (*spektʌ*), stanza 2

connected to the slippage and displacement iterability introduces into the discourse of presence. Tokens, through citation and grafting, can be transformed into types, and vice versa. So it makes sense that such substitutions should take place within the syntax of this study. Even more simply, (*spektʌ*) introduces a new phonetic dialectic: where (*tras*) moved between consonants and vowels, this study acts out a similar contest between token and type.

Two other notational elements characterize each stanza. First, each stanza is surrounded by a cloud of IPA diacritics, modifying notations used for phonetic detail, which are added to IPA letters to alter pronunciation. The first stanza is marked by a pall of tildes, which are used to denote a 'creaky voice' (what singers often refer to as 'vocal fry'). In standard IPA notation, this diacritic would appear below a letter ([ɣ̰]) to indicate that it should be pronounced with a more tightly constricted larynx, yielding a creaky or 'pulsed' phonation. The second stanza is surrounded by a cloud of sideways colons, used to indicate 'murmured voice,' or a breathy, whispered phonation ([ɣ̤]). The third stanza has two modifying diacritics, a series of circles to indicate voicelessness ([ɣ̥]), and a series of [h] superscripts indicating aspiration, the strong burst

The other notational characteristic of each stanza is the progressive blurring of the reflected half (below the divider). This effect—perhaps evocative of the de-centering of context or intention resulting from language's iterability—is, like the fading effect on *(tras)*'s coda, suggestive of movement. How the performer interprets this increasing blur or movement is left open.



While the score leaves much to performer discretion, when performed with the electronics, (*spektk*) takes on a more concrete form, emphasizing the reflective nature between live and acousmatic voice. In this study, the aforementioned phenomenological experience of hearing-oneself-speak is greatly emphasized, with the electronics acting as a text, a vocal

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inscription which both responds to and influences the performer. In the three stanzas, the electronics play a dual role: they repeat (iterate) the three syllables from 'iterable,' drawing out the performers speech and reflecting it throughout the acousmatic field; and they 'read' the text alongside the performer.

For the first aspect, the electronics relay delayed signals of the 'iterable' syllables. These iterated repetitions are not simple delays, however, but apply varying filters and amplitude changes in addition to altering the delay time, yielding a cloud of repetitions that are similar but always different (iter & itara). The acousmatic voices both emphasize the phonemes' iterability while also creating sequences of electro-textual traces.⁷⁵

The second aspect, in which the electronics read the text with the live voice, relies on a segmentation of each stanza into four phrases. Each half of the stanza is divided into two phrases, with each phrase beginning with an iterated syllable and ending with a line of sound poetry (e.g., stanza one's first phrase = "it t t [...] s k t u a↓"; stanza one's second phrase = "t t t [...] t o m i↓"). The performer reads only the first half of each stanza, and the electronic voices read this text and its reflection (below the divider) in near-simultaneity with the performer. There is a varying canonic relationship between live and electronic voices over the course of the three stanzas: initially the performer reads each line alone, then the electronic voices join in, in

Order of Entrance	
Stanza 1, phrase 1	live voice alone
Stanza 1, phrase 2	live voice; delayed acousmatic voices
Stanza 2, phrase 1	live voice; delayed acousmatic voices
Stanza 2, phrase 2	unison
Stanza 3, phrase 1	unison
Stanza 3, phrase 2	acousmatic voice; delayed live voice

Fig. 16: order of entrances in (*spektø*) stanzas

⁷⁵ The acousmatic repetition of the [b] syllable in stanza three carries obvious allusion to the 'blooming' gesture in Berio's *Thema*.

canon with the performer (entering after the performer's entrances). Over time, the electronics catch up, beginning each phrase in unison with the performer, until by the final phrase of stanza three, the electronics pull ahead, leaving the performer with the delayed entrance. This form is outlined in the table below:

The narrative implied by such a sliding canon is one in which the acousmatic voices gradually take control of the texture, or in which the text gradually pulls away from the speaker's intention.

There are always at least three acousmatic voices (in the musical sense of the word, i.e., 'lines') present: the delayed syllable (itself a pointillistic mass of voices), and a minimum of two voices reading the text (one reading the first half with the performer and one reading the reflection). The latter voices speak (in general) according to the phonation types indicated by the IPA diacritic clouds: in stanza one, the acousmatic voices are predominantly 'creaky', in stanza two, predominantly whispered, in stanza three, emphasizing unvoiced sounds, with an additional layer of sustained breath sounds implied by the aspiration diacritics. Together, these voices disrupt the self-identity of the performer (a quality which will continue to be emphasized throughout the piece), and gradually move from reflections to reflectors, their relationship to the live voice varying from supporting role (echo, voice of conscience) to something more alien and external (parasite, foreign body).

The visual projections for the stanzas are relatively simple compared to those seen in (*tras*), essentially consisting of simple images of the individual stanzas. Each stanza's first half is displayed in isolation, cross-fading over time with the reflection below the divider. While the first half always remains still, the reflections have a jittery movement, like a twitching extremity, implied by the blurring in the score.⁷⁶ When each stanza is completed, the camera slides along the divider to the following stanza. Such projections emphasize the score as a text, and the performance as an act of reading or recitation (as opposed to (*tras*), in which the performance seemed more to be actively writing the visuals onto the screen).

⁷⁶ In truth, it is the opposite. Unlike (*tras*), (*spektκ*) was composed after the commissioning of the kinetic projections, and so here the elements in the score evocative of movement *were* in fact meant to carry allusion to specific animations.

(*spektʁ*): Fricative field

(*spektʁ*)'s next episode is a meditation on unvoiced fricatives, consonants which produce their sound via a 'frication', a turbulent flow of air through a narrow channel. Fricatives produce differing bands of colored noise, and, like the formant frequencies in vowels, the bandwidths of fricatives are determined by the place of articulation. Unlike vowels, fricatives can be voiced ([z]) or unvoiced ([s]), and (*spektʁ*)'s fricative field focuses exclusively on the latter. The section is an analog to (*tras*)'s vowel chart, not only in its focus on a single category of phonation, but also in form and melodic source. Formally, the section consists of a handful of graphically superimposed gestures which the performer can read individually or use as a launchpad for improvisation. Musically, the fricative field generates melodies from smooth transitions between articulation placements in the mouth, producing bands of noise which gradually change their frequency and bandwidth. Like (*tras*)'s vowel chart, the section becomes a study in the liminal space between harmony and melody: while gliding between vowel positions produces both melodies (via frequency changes in individual formants) it also yields changes in harmony/counterpoint when multiple formants are changing simultaneously. The same is true for fricatives, which, in dealing with bands of noise, are always densely harmonic but whose changes (when moving in parallel motion) can be heard as melodic. In fact, the same frequencies which are emphasized by vowel formants are emphasized in fricative sounds (this is why we can differentiate vowels even when they are whispered—that is, even when they are pronounced as unvoiced fricatives), except certain fricatives (e.g., sibilants) can introduce dense fields of additionally emphasized frequencies.

The gestures in the fricative field range from alternations of fricative sounds to gradual transitions between them. In the latter category, there are two gestures which are represented in the score by an arrow connecting two IPA letters. One connects two sibilant fricatives, the retroflex sibilant ([ʂ]) and the alveolo-palatal sibilant ([ç]); the other transitions from the velar to the uvular fricative ([x→χ]). There are several gestures that alternate fricatives. Two quickly oscillate between labiodental and dental fricatives ("[f θ f θ f θ]"). Two alternate between more sustained sounds, including the gesture that alternates between glottal and epiglottal fricatives

([h, h̥]) before arriving at an epiglottal trill ([ʀ]). Another gesture focuses on the alveolar sibilant ([s]), so important already to *CDS*, but adds some diacritics from the extensions to the IPA (there are a small number of diacritics and even additional letters, which have been added to the IPA mostly to transcribe disordered speech). One such diacritic is an upward arrow below a sibilant letter ([ʃ̥]), which represents the whistled sibilant, produced occasionally as a speech impediment, but also phonemic in some southern Bantu languages. The [s] gesture in the fricative field requires the performer to turn this whistle on and off, alternating between a whistled and non-whistled sibilant. Finally, one gesture just sustains a consistent lateral fricative ([ɬ]), without transition or alternation. None of these phonemes appear in any of the study's 'key terms', so all are notated in black ink, in fact, with the exception of the quickly repeating sounds ("fθ fθ fθ"), the thematic concept of iterability is perhaps only clearly evident in the notation itself, with its long chains of repeating letters.

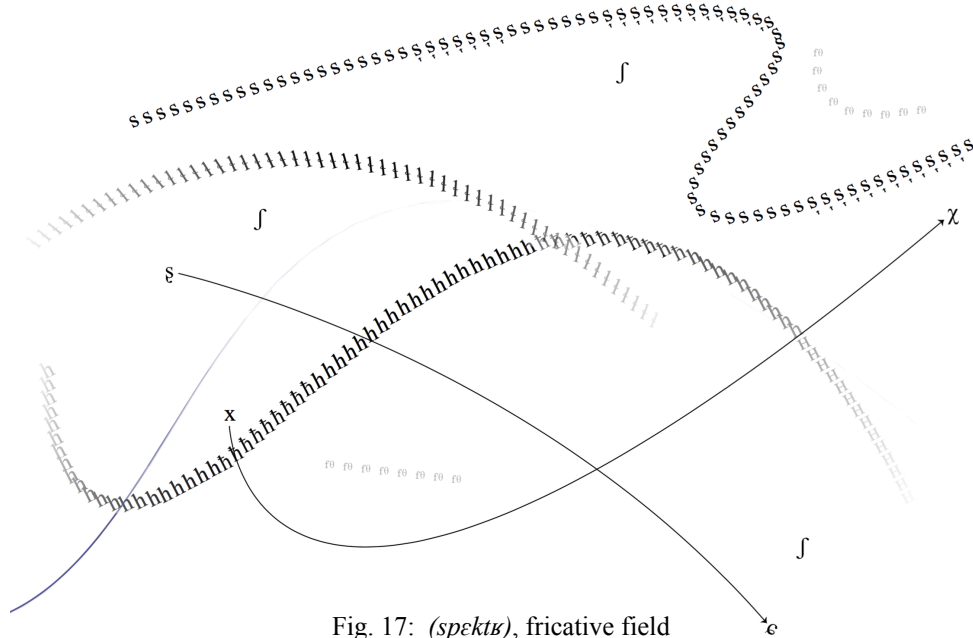


Fig. 17: (*spektv*), fricative field

Formally, the fricative field follows stanza three, and uses the aspirated diacritics as its locus of transition (notice that the [h] gesture is closest on the page to both stanza three and its diacritics). The electronics emphasize this connection to breath, as they consist almost entirely of gestures similar to those in the score, but emphasizing the more open fricatives with broad bandwidths (glottal and lateral fricatives). The most prominent acousmatic sounds are the

whistled fricative (added to emphasize a gesture which is quite subtle in live performance) and a few [ʃ]s peppered throughout the texture. The acousmatic voices are heavily reverberated, creating an expansive quality to the acoustic space—contrasting the intimate, almost claustrophobic nature of (*tras*)'s vowel chart. Like the vowel chart, however, the visual projections simply trace each gesture on the screen, assembling the full field and returning to the effect of voice-as-inscriber.

(*spektɐ*): Quotations

The next section, while extremely limited in its material, is thematically significant. The 'quotations' section marks the first articulation of 'spectre', the piece's title. The material consists almost entirely of repetitions of this word, as denoted by the tower of quotation marks stretching infinitely downward. This, like the delayed electronic articulations of the 'iterable' syllables in the opening stanzas, recalls the Derridean ideas of citation and graft. There's a well-known jocular anecdote that states that the Earth rests on the back of a turtle, and that this turtle rests on a second turtle, and that, when asked what the final turtle is standing on, the daft conclusion is that "it's turtles all the way down." While this anecdote is humorous for its impossible absurdity, with regard to the Derridean graft, it really *is* turtles grafts all the way down, as every utterance consists of a graft of a graft of a graft, ad infinitum. The word 'spectre' is repeated to emphasize the haunting aspect of such repetitions, that every graft maintains a ghostly remainder, as "each grafted text [radiates] back toward the site of its removal." Just as a specter haunts Europe, there is a specter haunting every (con)text.

This idea of the graft is carried forward in the essay "Living On," in which Derrida makes reference not to the graft itself, but to the text into which it is stitched, and how this idea of infinite radiation can expand the idea of 'text' itself:

a "text" [is] henceforth no longer a finished corpus of writing, some content enclosed in a book or its margins, but a differential network, a fabric of traces referring endlessly to

something other than itself, to other differential traces. Thus the text overruns all the limits assigned to it so far.⁷⁷

This understanding of a text without borders, is evoked by the quotation marks' eventual divergence beyond the two vertically aligned columns, a scattering of punctuation spilling beyond its borders. In addition to the quotes, the score contains another textual symbol splashed throughout: "i.e." This is a partial reference to the beginning of the same essay, which Derrida opens via a meditation on 'i.e.' and the expression "in other words" ("in other words" being, essentially, "i.e." in other words).⁷⁸ According to the logic of iterability, every word, when repeated, is altered, differing from its previous incarnation. One typically wouldn't offer a clarification by repeating the same text, in other words, by repeating the same text. However, iterability would suggest that the repetition does, in effect, become *other* words, as they exist in a

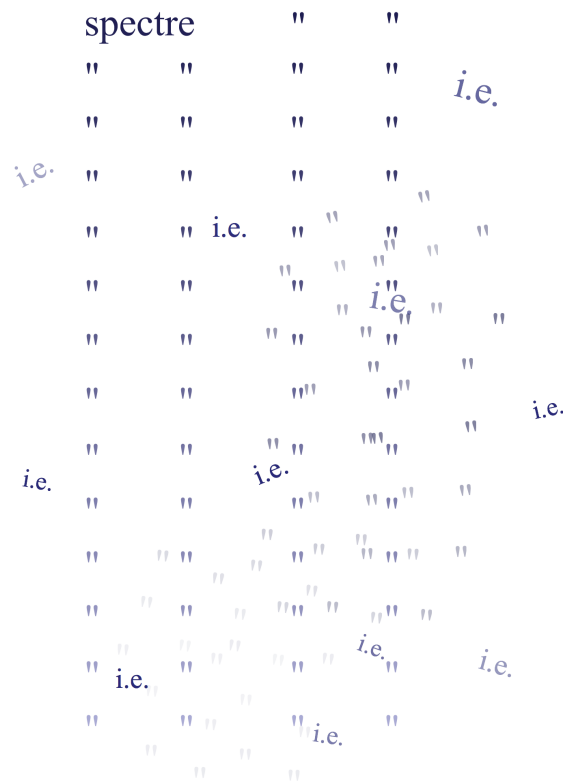


Fig. 18: (*spektv*), quotations

⁷⁷ Derrida, "Living On," trans. James Hulbert, *Deconstruction and Criticism* (New York: Continuum, 1979), 84.

⁷⁸ Derrida's use of the 'i.e.' in the opening to "Living On", while inspiring the thought that follows, is essentially unrelated to the argument I'm about to make.

new context, excised from their original source. Likewise, a more conventional use of the 'i.e.,'—in which the same signified is represented a second time using different signifiers (i.e., other words)—invites in the logic of the graft, spreading the signified across even more texts by incorporating further and further grafts and grafts of grafts. This is why the 'i.e.' is included in this section of (*spektk*): it calls in further grafts while emphasizing the iterability of the already reiterated "spectre."

Like much of (*spektk*), the score here leaves much open to performer interpretation, but performing *CDS* with the electronics restricts this freedom a little. The electronics here consist, as might be expected, of acousmatic voices adding further layers of repetition. A typical performance involves the live voice repeating 'spectre' regularly at 60 bpm. After eight repetitions establish a regular pulse, the electronic voices enter, initially articulating the upbeats, before quickly accumulating into a crowd of voices speaking the word, obliterating any sense of the pulse. These voices (which also, eventually, include some speaking 'i.e.'), are not differentiated simply by filters and amplitude shifts as in the opening stanzas, but are pitch shifted to various levels, marking the first time in the piece that the acousmatic voices are not recognizably those of the composer. This evokes the alterity of iterability even further, as what were once 'my' words, quickly become other upon repetition.

The visuals here continue the straightforward accumulative form seen in the previous section, with live and electronic voices speaking in sync to the visuals, implying a cause/effect relationship between sound and image, the snowballing mass of voices reflecting in the quick aggregation of graphics on the screen.

(*spektk*): Finale

This chorus of voices quickly transitions into the next section, (*spektk*)'s finale. An obvious allusion to (*tras*)'s p-cloud, the finale consists of an open cluster of phonemes scattered across the page. The material that makes up this mass is the same material that appeared in each of (*spektk*)'s prior sections, consisting of (in blue) several 'i.e.'s and the phonemes that are found in 'token', 'type', 'iterable', and 'spectre'; alongside (in black) various fricatives, IPA diacritics, and

Fig. 19: $(spekt_K)$, finale

Enclosed within this mass is a quotation: "in the beginning was the word." This phrase from the opening of the Gospel of John is ubiquitous in Western thought, inscribed onto Western metaphysics. It is also, of course, the logocentric utterance par excellence: it states that not only is there a positively identifiable origin point (and not a system of negative traces), but specifies that said origin point is *speech*.

Like any text, however, "in the beginning was the word" is grafted together, a citation of a citation of a citation. This is perhaps more apparent with this phrase than with any other text, it being referenced, quoted, paraphrased, modified, and parodied in innumerable texts across millennia. Even in this composer's work, the phrase has been grafted in several times. In 2014, I composed a setting of one of Brion Gysin's permutation poems, "In the beginning was the word,"

for speaking voice and chamber ensemble.⁷⁹ Grafting this text into *CDS* is, in effect, me quoting myself quoting Gysin quoting John. But, of course, the connections spill out into many other

Score

Ethan Hayden
after a poem by Brion Gysin

in the beginning was the word

♩ = 96

Guitar

Piano

Voice

Violin

Cello

1 2 3 4 5

6 7 8 9

Fig. 20: Ethan Hayden, *in the beginning was the word* (mm. 1-9)
(Infrasonic Press, 2014).

⁷⁹ From my program note: "In the early 1960s, Brion Gysin altered his 'cut-up technique' to produce a series of poems in which a brief phrase is repeated in various permutations. These poems, of which "I Am That I Am" is perhaps the most well-known, were written in collaboration with the computer scientist Ian Sommerville, and involved shuffling the words of a sentence in such a way that new, peripheral, or contradictory meanings are produced. Gysin recorded these poems and often performed them with musical and/or electronic accompaniments. The music for Ethan Hayden's *in the beginning was the word*, takes Gysin's poem of the same name and uses its permutation algorithm to generate a musical environment for the poem's recitation. The music attempts to capture both the mantric and playful qualities of the text, while also emphasizing the more objective aspects of its construction." The piece was premiered at the same Wooden Cities / Steve McCaffery concert at which (*tras*) had its premiere.

texts: for instance, Gysin's 'cut-up technique' was famously adopted by Burroughs, whose text, *The Electronic Revolution*—which was cited earlier for its claim that the written word is a virus from outer space—begins with this same phrase. Furthermore, as we shall see, this line appears in Benjamin's "Die Aufgabe des Übersetzers," and thus plays a role not only in Benjamin's translation theory, but in the second piece in this dissertation project, grafting the two elements together. This explains the quotes and ellipses which surround the phrase in the score. "In the beginning" is always already a quotation.

The phrase is notated as the center of (*spekt*)'s finale-cloud, as it purports to locate the origin point, occupying the central place in the metaphysics of presence. However, if we understand this massive text to extend beyond the page, infinitely, then we know that it can have no true center.

Just as the p-cloud moved toward a collision with the supplementary "[p̂lemã]", so too does (*spekt*)'s finale move toward a final sound which both completes and obliterates it. (*spekt*)'s ultimate phoneme is a sustained [s], which refers back to the many meditations on [s] that have occurred throughout *CDS*, while also reaching beyond *CDS* to a wider network that includes, for example, the sibilant section of Berio's *Thema* and perhaps Dick Higgins bawdily sibilant sound poem, "glasslass".⁸⁰ Above the [s] is a fermata, noting its extended duration, and below is stack of the whistle sibilant arrows, implying a sibilant sound with a comically prominent whistle (a 'super-sibilant').

The electronics in the finale are more prominent than they have been throughout the piece, fully overpowering and usurping the live performer. Once the performer begins moving through the cloud, a chorus of acousmatic voices begins reading through the cloud in parallel, some making explicit reference to earlier sections (e.g., re-reading material from the opening stanzas), others producing new phonetic gestures or extra-linguistic exclamations. The latter is significant in that this marks the first moment in *CDS* when the voice (live or acousmatic) clearly escapes the linguistic network and resorts to primal cries, grunts, and shrieks. As the voices

⁸⁰ "assass / ss / ass / ass / ss / sss / sss / glasss / ass / assglass / ss". Dick Higgins, "glasslass," (1970).

continue through the cloud, they multiply in number and volume, drowning out the live performer's equally animated exclamations. While (*tras*)'s coda offered peripheral voices that recalled Žižek's "shut up, I can't hear myself think!", in the performance of (*spektv*)'s finale the performer is put in a more desperate position: "shut up, I can't hear myself *speak*!"

As this is unfolding acoustically, the visual projections gradually reveal the finale-cloud through a slow wipe. This wipe leaves the central area empty, omitting the logocentric quotation and displaying only a void. Once approximately half the cloud is revealed, the frantic crescendo is interrupted both musically and visually, and the quotation appears onscreen while a small number of acousmatic voices speak it in unison. These recorded voices consist of multiple versions of the composers voice, and one recording of Brion Gysin speaking the same phrase (taken from a recorded performance of his eponymous poem). This explicitly references the aforementioned chain of quotations: me quoting myself quoting Gysin etc. All these voices appear in simultaneity, and hint at the larger continuity of this chain of grafts. This marks the only moment in *CDS* where the acousmatic voice is different from the composer's voice; and is also the only moment in which the author of the inscription is absent not because of a temporary absence, but "because he is dead."⁸¹ The Gysin quotation is the ghostly voice of a specter.

After a short lift (the duration of which varies from performance to performance), the piece plunges itself back into the cloud, with seemingly hundreds of voices frenetically maneuvering through the network of traces as the cloud continues to unfold across the screen. Meanwhile, "in the beginning" has remained onscreen, with a flickering of quotation marks and ellipses appearing and disappearing on either side. This texture continues its increase in volume and activity until it collides with the final super-sibilant, cutting off the mass of voices and ending the section. Onscreen, the super-sibilant appears alone, as if on a different plane (recalling the supplementary relationship between "[p̄lemã]" and the p-cloud). Sonically, the electronics produce a mass of sibilant [s] sounds, with fiercely strong whistles (to which the live performer may or may not contribute). As the image fades from the screen, the whistles too fade

⁸¹ Gysin died in 1986.

away, leaving only the sibilant sounds. These sibilant recordings eventually fade out as well, leaving only a familiar cluster of ten sine waves in the sibilant range.

While (*tras*) ended with the quasi-psychotic rambling of a defeated subject, (*spektɤ*) ends with a dramatic chorus of extra-linguistic exclamations. Both follow essentially the same narrative trajectory: in the former, the performer searches for the master signifier, finding only traces of traces; in the latter, the performer searches for an originary voice, the text from which all others are grafted, and finds only a ghostly chorus of specters. Both (anti)climaxes act as narrative conclusions to their own respective studies, as well as to *CDS* as a whole.

(*sãdɤ*)

The 'last' and most brief of the three phonetic studies, (*sãdɤ*) was composed in January 2015, and first performed at the full premiere of *CDS* at the 2015 Digital Poetry and Dance event. The title renders the French word 'cendre' ('cinder') in IPA letters. Like 'trace', 'différance', 'supplement', 'spectre', 'hauntology', or 'graft', the *cinder* is another nonsynonymous synonym for the 'nonpresent remainder' so integral to Derrida's work, but one coined much later than the others,⁸² and one which he felt had already formed an "insistent motif in a number of earlier texts."⁸³ The cinder is a remainder, but one which burns itself up immediately upon inscription.

Ashes or cinders are obviously traces—in general, the first figure of the trace one thinks of is that of the step, along a path, the step that leaves a footprint, a trace or a vestige; but "cinder" renders better what I meant to say with the name of trace, namely, something that remains without remaining, which is neither present nor absent, which destroys itself, which is totally

⁸² Derrida published *Cinders* in 1982, but claimed he 'discovered' the term when re-reading *Dissemination*, a text of his published a decade and a half earlier. On the last page of the latter, in a paragraph of acknowledgements, sits the phrase "il y a là cendre" ("cinders there are"). Derrida himself says of the initial phrase, "the phrase dispensed with all authorization, she had lived without me. She, the phrase, had always lived alone." Derrida, *Cinders*, trans. Ned Lukacher (Lincoln: University of Nebraska Press, 1991), 21.

⁸³ Derrida, "There is No *One* Narcissism," in *Points: Interviews, 1974-1994*, ed. Elisabeth Weber, trans. Peggy Kamuf et al. (Stanford: Stanford University Press, 1995), 208.

consumed, which is a remainder without remainder. That is, something which is not. [...] The cinder is not!⁸⁴

It is this understanding of the cinder as that which, as Derrida says elsewhere, "erases itself totally, radically, while presenting itself,"⁸⁵ that most informs (*sãdκ*). While the other studies were extensive, multi-sectional explorations of numerous concepts, (*sãdκ*) is a simple two-stanza sound poem. Its phonetic material is restricted to instantaneous sounds, that is, sounds that occur as impulses, that cannot be sustained. There are two types of phonemes that fall into this category: stops/clicks—simple obstruent consonants which can exist only as momentary attacks; diphthongs, in which the voice glides between two different vowel sounds within a single syllable. Diphthongs must remain in motion to be diphthongs—to sustain one at any point would be to destroy its identity and redefine it as a simple vowel (or monophthong); as impulses, stops and clicks are physically impossible to sustain. Both sounds are therefore marked by impermanence and transience.⁸⁶ Like cinders, they 'erase themselves totally while presenting themselves'.

(*sãdκ*)'s lexicon consists of most of the unvoiced stops found in the IPA ([k, p, t, t̪, q] et al.), all the simple clicks ([ǀ, ǁ, ǃ, ǂ, Ǆ]), and all the diphthongs which are phonemic to French ([ʊa, ʊẽ, yi, yẽ]) and English ([äʊ, aɪ, eɪ, ɔɪ, oʊ]). These are arranged into two stanzas of phonetic poetry, the first of which utilizes the full lexicon—including two additional impulses from the extended IPA: the bilabial percussive (lip smacking, [w̥]) and the bidental percussive (teeth gnashing, [ɸ]); the second stanza focuses only on the unvoiced sounds, abandoning the diphthongs.

Just as Derrida (re)discovered the concept of cinders in an older text of his, much of the phonetic gestures in (*sãdκ*) have been heard before, particularly in (*tras*). For example, "[l / p p t

⁸⁴ Ibid., 208.

⁸⁵ Derrida, "On Reading Heidegger: An Outline of Remarks to the Essex Colloquium" *Research in Phenomenology* 17 (1987), 177.

⁸⁶ Indeed, stop consonants are essentially the linguistic analog of what are referred to as 'attack transients' in the spectral analysis of instrumental sounds.

k]" from the first stanza of (*tras*) reappears in a slightly varied retrograde form in (*sãdk*)'s third line: "[k t p p !]". Likewise, (*sãdk*)'s following line opens with "[p t p k]", which is a retrograde form of a similar gesture from (*tras*)'s second stanza (it is also important to note that these three phonemes, being the consonants found in 'token' and 'type', play an important role throughout (*spektk*)). More significantly, (*sãdk*)'s second stanza begins with a paraphrase (graft) of (*tras*)'s opening line, "[t t s p k l]", which becomes "[t t ‡ p k l]". Such variations are not only relevant ways to develop material, but are also phonetic realizations of compositional devices (transposition, substitution, retrogradation) common to music. The stanza ends with a paraphrase of the final gesture from (*tras*)'s recapitulation, "[kpt Ø t ě]", which becomes "[k p t Ø q !]". Finally, where (*tras*) ended with a frantic recitation of the titular concept ("des traces de traces..."), we are reminded that the cinder is a 'remainder without remainder' ("The cinder is not!"). Therefore, the final articulation in (*sãdk*) is thus not a psychotic mantra or a violent exclamation, but a simple closing of the mouth ([ɤ]), an extinguishing of both the phonetic sounds and the subjectivity that produced them.

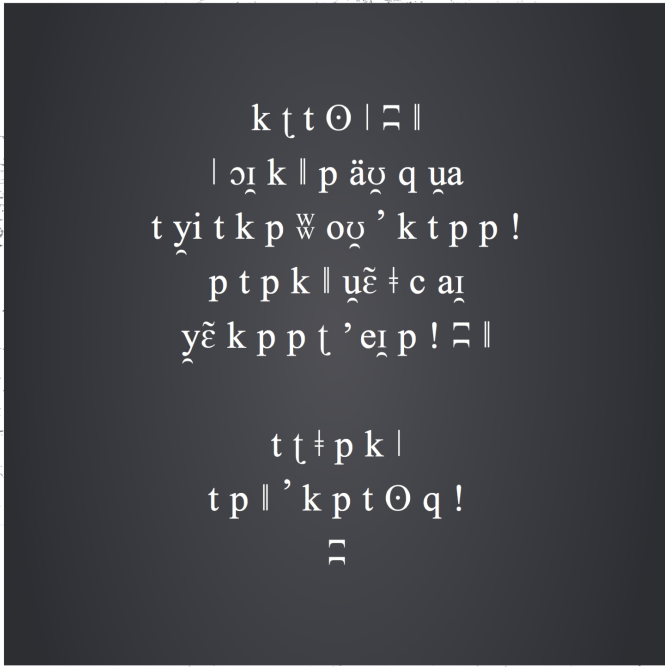
	c	o	n	t	e	n	t	s	
1...	Introduction: Mourning Becomes Telepathy								...1
21...	P	r	o	l	o	g	u	e	...21
30...	Animadversiones/Animadversions								...30
31...	Feu	la	cendre	/	Cinders				...31
78...	N	o	t	e	s				...78

Fig. 21: Derrida, *Cinders*, table of contents
(University of Nebraska Press, 1991).

Cinders is, formally and typographically, one of Derrida's more beautiful texts. The main body of the work consists of two texts running in parallel: on the rectos, a quasi-poetic

polylogue writing a discourse on the cinder; on the versos, "Animadversions," a collage of excerpts from the author's previous works that (without realizing it) were already engaging in the fiery discourse. The English translation cited earlier emphasizes this through (often radically) varying typescripts and font sizes, and a playful typography often reminiscent of post-war concrete poetry. Even the table of contents seems particularly inspired (see Fig. 21).

While the concept of the cinder inspired (*sādk*)'s form and content, *Cinder's* typography—particularly the table of contents—was the key influence behind the layout of the poem in the score, which depicts a monolithic slate, surrounded by soot particles, onto which are inscribed the poem's two stanzas:



k t t ⊙ | ∇ ∥
 | ∇ k ∥ p ä ū q ū a
 t y i t k p ∞ o ū ' k t p p !
 p t p k ∥ ū ã † c a i
 y ã k p p t ' e i p ! ∇ ∥

 t t † p k |
 t p ∥ ' k p t ⊙ q !
 ∇

Fig. 22: (*sādk*), poem

Beneath this block a quotation appears at the end of a charcoal line: "On écrit avec de la cendre sur de la cendre" ("One writes with cinders on cinders"). This is taken from an interview in which Derrida not only expounds the experience of the cinder, but points to the potential hopefulness at the heart of this experience:

This is the absolute destruction of testimony and, in this regard, the word "cinder" says very well [...] that which in the trace in general, in writing in general, effaces what it inscribes. Effacement is not only the contrary of inscription. *One writes with cinders on cinders*. And not only is this not nihilistic, but I would say that the experience of cinders, which communicates with the experience of the gift, of the non-keeping, of the relation to the other as interruption of economy, this experience of cinders is also the possibility of the relation to the other, of the gift, of affirmation, of benediction, of prayer...⁸⁷

This final quotation marks the only point in *CDS* in which Derrida's literal words are 'set', and yet, they are never actually sounded in the piece, appearing only as a silent inscription at the bottom of the score, a reminder of the cinder's transience.

On écrit avec de la cendre sur de la cendre

Fig. 23: (*sādk*), epigraph

Whereas the other studies have ended in maddening hauntology, (*sādk*) simply ends, extinguishing itself, or, in the above sense of the 'gift'—giving itself up.

Such austerity is emphasized by this study's lack of electronics. Though, when performed after (*spektk*), the piece may overlap with the prior study's suspended sine tones,

⁸⁷ Derrida, "There is No *One* Narcissism," 209 (emphasis added). Thanks to Cort Lippe for his assistance in tracking down the quotation's original French: Derrida, "Il n'y a pas le narcissisme," in *Points de suspension, Entretien* (Editions Galilée, 1992), 223.

(*sãdk*) lacks any acousmatic voices adding commentary or stitching in grafts from other texts.⁸⁸ It is, therefore, far more intimate and solitary, but arguably all the more hopeful as a result.

The visual projections play an important role in underscoring the experience of the cinder in performance. The black slate appears on the screen, and as the performer recites each of the poem's letters, these letters appear on the slate. While the other studies' projections are choreographed simulacra of the voice writing onscreen (with animated sequences of letters triggered live by the performer), (*sãdk*)'s visuals use Miller Puckette's *bonk~* external, which follows an audio signal's percussive attacks, to trigger the display of the characters upon each sound's utterance. Thus, in (*sãdk*), we get closer than ever to an actual writing with the voice. These characters appear onscreen for only brief flickers, disappearing as quickly as they appear, just as cinders 'erase themselves while presenting themselves'. This not only emphasizes the cinder's characteristic impermanence, but also the idea of forgetting. In Derrida's words, "Cinders is the destruction of memory itself; it is an absolutely radical forgetting. [...Cinders] is an absolute non-memory, [...] incineration as experience, as the elementary form of experience."⁸⁹ As soon as the letters appear onscreen, they are immediately forgotten. Like the cinder, "they are a fragile record, easily lost."⁹⁰ At the poem's conclusion, the epigram below fades in silently. As the rest of the screen fades to black, the quotation remains at the bottom like a glowing ember, before it too is extinguished.

The setting of hauntology

As a work of poetry and music, *CDS* has a number of aims: to demonstrate the rich sonic vocabulary present in linguistic sounds; to position these sounds in a musical and graphic context that emphasizes this richness; to create constructive intersections between phonetic/sound/concrete poetry and contemporary vocal music; and, perhaps most significantly, to expand the

⁸⁸ All this, despite the fact that Derrida's *Cinders* is itself split between polylogue of an indeterminate number of voices and a graft of citations from previous works.

⁸⁹ Derrida, "There is No *One* Narcissism," 209.

⁹⁰ Kenneth Rufo, "Shades of Derrida: Materiality as the Mediation of *Différance*" in *Rhetoric, Materiality, & Politics*, ed. Barbara A. Biesecker and John Louis Lucaites (New York: Peter Lang Publishing, 2009), 243.

idea of 'text-setting' beyond simply grafting a new melody onto an existing text. As stated earlier, *CDS*'s chief attempt is to create a musical environment in which Derridean thought can be inhabited by performer and listener, establishing a *mis-en-scène* in which the supplement can be actively engaged—and vice versa, using Derrida's work as a foundation and backdrop for a musical composition. *CDS* has demonstrated that a musical work can 'set' a critical or philosophical text in broader ways than common-practice text setting, namely, by encircling and rehearsing the thought explicated within the work.

Like any text-setting, *CDS* has a supplementary relationship to its text. In one way, it is a violation. Derrida's often dense and difficult prose requires much careful reading—indeed, a great deal of his oeuvre manifests itself *as* close (re)readings (of Rousseau, Husserl, Saussure, etc.). It is through the act of reading texts that the work is undertaken, and to excise the ideas from their textual contexts and re-situate them in a musical or poetic environment is surely to do great violence to them. Therefore, no one can claim that *CDS* contributes to Derrida's work through explication; no listener not already familiar with Derrida will leave a performance of *CDS* with any new understanding of the supplement. *CDS* is not meant to explicate or demonstrate the supplement as any sort of substitute for or appendix to reading Derrida.

However, while the supplement can be destructive (virulent), it also makes possible the very thing that it corrupts. I would not be so bold as to claim that *CDS* is somehow 'always already' at the heart of Derridean thought. However, as a more abstract form, music/poetry can enact the supplement in a way that a text cannot. Take for example, the idea of the cinder. Derrida's explication in *Cinders* already requires a more poetic prose style than his typical approach, and yet *Cinders* is still a dense and circuitous text, always chasing after the cinder but never locating it (surely, this is part of the point). However, in creating a collage of prior texts that hint at the cinder's operation, *Cinders* itself is not an act of obliteration at the origin, but rather a series of resurrections, and act of *memory*—in exact *opposition* to the experience of the cinder itself ('radical forgetting'). The cinder is a 'remainder without remainder' but *Cinders*' "Animadversions" is nothing but remainders. However, *CDS*, and (*sādḁ*) in particular, create a more muted work that actively rehearses the nonpresent remainder, and, while still containing

subtle grafts to broader texts, more actively outlines the 'non-memory' of the spectral trace. Therefore, like a supplement, it makes up for a lack in that to which it doesn't belong, to which it is an unwelcome excess.

As already acknowledged, contained within this rehearsal is a betrayal of the logic of the supplement: the 'dangerous narrative' that inserts a signifier where there should be only a differential network of traces, an incinerated cinder. And yet, as noted earlier, such a violation reveals the productive work of the supplement (e.g., making signification possible). And of course, while the narrative has a disruptive relationship within the logic of the supplement, it is this very disruption, corruption, contradiction that makes the relationship between *CDS* and Derrida's work so fruitful. Rather than illustrating, realizing, or embodying a text, as in common-practice text-setting, *CDS* sketches out a paradigm in which a setting engages in a dynamic, if flawed, discourse with its text. While *CDS* is surely not the first text-setting to partake in productive dialogue with its source material, it is unique in that its subject matter is the very nature of such a relationship, the logic that makes such a discourse possible: the corrupting and completing work of the dangerous supplement.